



MEMORANDUM

TO: Deschutes County Board of County Commissioners (“Board”)

FROM: Caroline House, Senior Planner

DATE: March 22, 2023

RE: Deliberations: Board Review of Two Appeals for a Modification Request to the Thornburgh Destination Resort’s Fish & Wildlife Mitigation Plan (“FWMP”).

On March 29, 2023, the Board will conduct deliberations to reach a final decision on the Board’s review of two appeals of a Hearing Officer’s decision denying a Modification request to the Thornburgh Destination Resort’s FWMP.

I. BACKGROUND

In August 2022, the developer of the Resort (“Applicant”) applied for a Modification to replace the 2008 FWMP with a new FWMP (“2022 FWMP”). A Hearings Officer denied the Applicant’s request and, subsequently, two appeals of the Hearings Officer’s decision were received. The Board agreed to hear the appeals and held a *de novo* appeal hearing on February 1, 2023. The record is now closed and includes over 800 submittals for the Board’s consideration.

II. SUMMARY

Please see the attached Decision Matrix for the deliberation issues and related summaries.

III. 150-DAY LAND USE CLOCK

The 150th day on which the County must take final action on this review is April 10, 2023. Once deliberations are complete, a decision will be drafted and staff will present the draft to the Board on April 10, 2023.

IV. RECORD

The record for the subject application and appeals is as presented at the following Deschutes County Community Development Department website:

<https://www.deschutes.org/cd/page/247-22-000678-mc-thornburgh-destination-resort-modification-cmpfmpfwmp>

Attachments: Decision Matrix
 Applicant's Final Argument

Thornburgh Modification Decision Matrix

File No. 247-22-000678-MC / Appeals Nos. 247-22-000984-A & 247-23-000003-A

ISSUE 1

1. Does the Applicant’s 2022 Fish and Wildlife Mitigation Plan (“FWMP”) ensure the “no net loss” standard is met? Yes or No?

BOCC Decision Options:

Given the complexity of this question, the Board may wish to review *Issues 2-8* below before making a decision on *Issue 1*. These more detailed sub-issues are related to the Applicant demonstrating the “no net loss” standard is met and may help the Board develop their final position on *Issue 1*.

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The proposed 2022 FWMP must ensure any negative impacts on fish and wildlife habitat will be completely mitigated so there is “no net loss” of the resource per DCC 18.113.070(D).</p> <ul style="list-style-type: none"> The Applicant argues the 2022 FWMP ensures the “no net loss” standard is met. The 2022 FWMP in large part replaces the cool groundwater lost from Resort pumping with cool groundwater from transfers and cancellations, and also adds surface water to increase stream flows and reduce temperatures. The Applicant’s scientific analysis shows streamflows increased while temperatures decreased in virtually all reaches and times. Thornburgh provided extensive modeling of the changes to flow and temperature, and retained an expert Fish Biologist to assess the impacts/benefits to fisheries habitat from the changes to flow and temperature. Appellant Gould argues the County cannot rely on the January 31, 2023 FWMP, and Conditions 38 and 40 to find that Resort is likely and reasonably certain to completely mitigate its negative impacts on fish and wildlife habitat, or meet any of the applicable code requirements. Oregon Department of Fish and Wildlife (“ODFW”) argues due to the complexity of this proposal, the substantial changes being proposed, and lack of specificity in the supporting documentation, ODFW cannot concur that the 2022 Plan will result in reliable, legally protected wet water that results in no net loss or no net degradation of the resource. The Confederated Tribes of the Warm Springs Reservation of Oregon (“the Tribe” or “CTWS”) argues the Applicant’s modeling of the impacts of the 2022 FWMP to the water resources in the Deschutes Basin are uncertain and this application fails to provide clear, concise and objective compliance standards to assure that the 2022 FWMP will secure the necessary water rights, or that the proposed mitigation is likely and reasonably certain to assure compliance with the “no net loss” standard. 	<p>The Hearings Officer found the Applicant had not demonstrated the “no net loss” standard was met and denied the Applicant’s request on two key issues:</p> <ol style="list-style-type: none"> Input from the Oregon Department of Fish & Wildlife (“ODFW”) is a relevant evidentiary consideration in determining if the “no net loss” standard is met. The 2022 FWMP does not contain clear, objective and enforceable compliance language, and for this reason, there can be no assurance that the 2022 FWMP is likely or reasonably certain to succeed at achieving the County’s “no net loss” requirement. 	<p>If the Board finds the “no net loss” standard is met, staff recommends the Board review Issue 8 to provide direction to staff for the ongoing compliance and monitoring requirements.</p> <p>Staff has concerns regarding the County’s responsibilities for monitoring the Resort’s ongoing compliance with the 2022 FWMP and the County’s review of the proposed annual reports.</p>

- Central Oregon LandWatch (“COWL”) argues ODFW does not agree to the 2022 FWMP and ODFW agreement to an FWMP throughout the life of the resort is a condition of approval of a prior land use decision. For this reason, the County may not make any land use decision for a property in violation of the conditions of approval of a previous land use decision.

ISSUE 2

2. Did the Applicant present more credible and/or persuasive evidence to demonstrate the “no net loss” standard is met? Yes or No?

BOCC Decision Options:

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>As part of the County’s review of this application, the County has received thousands of pages of testimony and evidence to support arguments in support and in opposition to the Applicant’s request. These materials were submitted by land use attorneys, water law attorneys, water experts, wildlife experts, State Agencies, the Confederated Tribes of Warm Springs, various interest groups, property owners, Central Oregon farmers, and other interested persons.</p> <ul style="list-style-type: none"> • The Applicant argues they have met their burden of proof by undertaking extensive modeling of groundwater flows and the thermal impacts from the plan, and by providing more than 20 expert technical reports and memos that conclude that the use of the rights as described in the 2022 FWMP will meet the “no net loss” standard. • The Applicant argues relying on data from 2016 was a reasonable year to use and the models from this year provided conservative results on the benefits of the 2022 FWMP. • The Applicant argues Thornburgh’s experts utilized the United States Geological Survey (“USGS”) GSFlow modeling tool that was based on real information collected by the USGS and Oregon Water Resources Department (“OWRD”) between 2001-2015. The results from Thornburgh’s GSFlow data reflect actual groundwater data within that period. • The Applicant argues ODFW has stated they have not analyzed the modeling efforts, nor would they, until standards they invented pertaining to “reliability” that lack any basis in law are met. • The Applicant argues the “no net loss” standard does not require the Applicant to mitigate for actions and events under the Deschutes Basin Habitat Conservation Plan (“HCP”). The Applicant also argues the HCP is under a threat of challenge, and whether its measures will or will not be implemented is unknown. • Appellant Gould, ODFW, the Tribe, and opponents argue the Applicant’s modeling inputs do not accurately reflect the Deschutes Basin conditions. For this reason, the Applicant’s modeling and associated expert reports cannot be relied upon. 	<p>The Hearings Officer made the following findings related to this issue:</p> <ul style="list-style-type: none"> • The Applicant’s technical evidence was prepared by credentialed experts who provided an extreme level of analysis and detail. • The opponents’ expert evidence is not nearly as comprehensive as Applicant’s. • The opponents’ expert evidence is less focused on the specific water sources proposed by Applicant and their impacts on fish habitat. • The opponents’ technical evidence is less credible and persuasive than the technical evidence proved by Applicant. 	

- Appellant Gould argues their water experts presented more compelling evidence that demonstrates the Applicant's proposal does not meet the "no net loss" standard.
- ODFW argues when evaluating the potential impacts of any project, it is imperative that the environmental baseline is characterized. In this case, no scoping of the environmental baseline or mitigation options took place with resource managers or regulatory bodies, and the environmental baseline was determined solely and independently by the applicant's consultant team.
- ODFW states although ODFW has recognized that the general methods utilized for modeling were acceptable, the mechanics of the model are immaterial given model inputs rely partially on unsubstantiated assumptions of past water use (past use of transferred water rights) and current basin conditions.
- ODFW argues instead of first modeling the impacts of resort groundwater pumping and applying specific mitigation measures to address the adversely affected areas, the Applicant and their consultants have attempted to tailor a collection of water rights available for transfer into a mitigation package.
- ODFW argues the first step in development of a new mitigation plan should have been to use the best available tools to analyze the impact of the Resort's pumping on the aquifer, locations of groundwater expression, and streamflow.
- ODFW argues the Applicant's analysis should have also considered reasonably foreseeable future impacts and conditions, including regional streamflow conditions required by the legally enforceable HCP, and accounting for the consistent reduction in aquifer levels. Knowing when/where impacts are observed and where they are most significant should then be used to guide in kind, in-proximity mitigation proposals.
- The Tribe argues appropriate modeling and reliable data is particularly salient in light of ODFW's stated concerns pertaining to the Resort's groundwater pumping impacts to seeps and springs that contribute cold water to the Deschutes basin. The Tribe shares these concerns.
- The Tribe argues a mitigation strategy which relies on protecting water in-stream combined with other habitat restoration projects such as riparian restoration should be required. These kinds of mitigation actions are quantifiable, transparent and reliable in a time of heightened concern over resource stability. They also offer a level of resiliency that the 2022 transfer strategy does not because they do not rely as heavily on modeled assumptions.

ISSUE 3

3. Does compliance with the OWRD Ground Water Mitigation Program ensure the Applicant’s 2022 FWMP meets the “no net loss” standard? Yes or No?

BOCC Decision Options:

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Applicant’s proposal relies on the OWRD Ground Water Mitigation Program to implement the required “no net loss” mitigation.</p> <ul style="list-style-type: none"> • The Applicant argues their expert modeling and evidence demonstrates the OWRD Ground Water Mitigation Program requirements, associated with the proposed water right transfers to the Resort, will ensure the “no net loss” standard is met. • The Applicant argues in virtually all other Deschutes County resort approvals OWRD mitigation was shown to meet the no net loss standard and, until Thornburgh, only a portion of Eagle Crest approvals provided anything other than OWRD mitigation. • The Applicant argues measures that provide actual mitigation but that do not qualify as Deschutes Basin Groundwater Program mitigation, also merit consideration in determining compliance with the “no net loss” standard. • The Applicant argues no single measure or water right meets the no net loss standard on its own, nor must it. Instead, the County must review the totality of the impacts of its actions to address the “no net loss” standard. • Appellant Gould argues commitments to comply with OWRD mitigation do not ensure no net loss/degradation of fish and wildlife resources. • Appellant Gould argues it is an inappropriate strategy to use short term transfers to develop a residential water supply that by rule must have reliability and resiliency for at least 10 years in its water portfolio. By its own admission OWRD performs a less rigorous review of Temporary Transfers because they can be cancelled or curtailed. Thornburgh is seeking to exploit this OWRD practice of readily issuing temporary transfers. Short-duration water rights are not a secure and reliable water supply for a quasi-municipal water provider. • Appellant Gould argues the Resort proposes to use water from the three (3) existing OWRD exempt wells during the buildout of Phase A-1 and the Applicant has not addressed the impacts and mitigation requirements. • ODFW argues a Fish [Mitigation] Plan is necessary because water law does not address impairment to fish habitat, particularly water quality. 	<p>The Hearings Officer did not make clear findings on this issue.</p>	

- ODFW argues water law does not consider or ensure water development results in “no net loss” to the resource or fish habitat as considered in DCC 18.113.070(D) and the Applicant’s modeling, to-date, is not conclusive.
- The Tribe argues OWRD’s water right transfer process focuses on injury to other water rights and does not consider fish and wildlife impacts. For this reason, the Tribe and ODFW must independently evaluate compliance with the “no net loss” standard.
- COWL argues Thornburgh is proposing to switch from G-17036, a permanent source of water, to temporary water use authorizations, almost all of which will expire in 5 years or less, with no permanent water supply for the resort to rely upon.

ISSUE 4

4. Is ODFW approval of the 2022 FWMP required and/or a substantial consideration when determining if the “no net loss” standard is met? Yes or No?

BOCC Decision Options:

Yes = The Applicant’s request is *denied*. No additional issues in the matrix need to be addressed.

No = The BOCC may *approve* the Applicant’s request and the BOCC can proceed to the next issue.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>ODFW are technical experts on fish and wildlife habitat needs in Oregon. Based on the available information, ODFW does not concur that the 2022 FWMP will yield reliable, legally protected wet water that results in no net loss or no net degradation of the resource.</p> <ul style="list-style-type: none"> • The Applicant argues the “no net loss” standard does not require ODFW approval. It is a County standard only. • The Applicant argues no provision of the CMP/FMP or County code requires ODFW approval of a fish and wildlife management plan (FWMP), or specifically a plan related to the mitigation of impacts on fish. • The Applicant argues ODFW are not the experts on water law or on issues related to the modeling of water quality. • The Applicant argues ODFW has not analyzed the modeling results even though the Applicant has provided ODFW extensive and detailed scientific data by qualified experts on the impacts and benefits of the 2022 FWMP. • Appellant Gould argues that prior LUBA and Court of Appeal decisions for the Thornburgh Resort have required ODFW approval of the 2008 FWMP and this is required under FMP Condition 38. • Appellant Gould argues all Deschutes County Destination Resort approvals, including Thornburgh’s FMP approval, included findings that ODFW confirmed the “no net loss” standard is met. 	<p>The Hearings Officer made the following findings related to this issue:</p> <ul style="list-style-type: none"> • The “no net loss” standard (DCC 18.113.070(D)) does not require ODFW approval of Applicant’s 2022 FWMP proposal. • However, this finding does not mean that ODFW comments, recommendations, or technical expertise are irrelevant or not to be considered. To the contrary, the Hearings Officer considered ODFW comments in this case to be very relevant. • The Hearings Officer considered the ODFW comments to be provided by persons within ODFW who are competent and technically skilled in matters related to fish and wildlife habitats. 	

<ul style="list-style-type: none"> • Appellant Gould argues ODFW has review authority because the Resort’s proposal will impact the Oregon spotted frog, which is listed as threatened under the Endangered Species Act (“ESA”). • The Tribe states ODFW possesses sufficient expertise to review strategies for protecting fish and fish habitat as well as to promote anadromous fish recovery through habitat restoration, and this is recognized in the County’s policies which rely in part on coordination with stakeholders to support healthy native fish populations through fish habitat management and restoration (see Deschutes County Comprehensive Plan (“DCCP”) Section 2.5, Goal 4, Policy 2.5.14). • The Tribe argues ODFW and CTWS, as Deschutes Basin co-managers, work to support habitat needs for the species, and coordinate hunting regulations consistent with ODFW management plans and CTWS management goals. The Tribe further confers with ODFW for consistency with the State’s management that also supports perpetuation of the species and conservation necessity standards. • COWL argues the developer was granted a conditional use permit for a destination resort on the condition that a FWMP approved by both BLM and ODFW was to be adopted and implemented throughout the life of the resort. Without ODFW agreement, the conditions of the original approval requiring ODFW agreement throughout the life of the resort are not met. 	<ul style="list-style-type: none"> • Ultimately, the Hearings Officer found input from ODFW is a relevant evidentiary consideration in determining if the “no net loss” standard is met. 	
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ISSUE 5

5. Is the CTWS approval of the 2022 FWMP required and/or a substantial consideration when determining if “no net loss” standard is met? Yes or No?

BOCC Decision Options:
Yes = The Applicant’s request is *denied*. No additional issues in the matrix need to be addressed.
No = The BOCC may *approve* the Applicant’s request and the BOCC can proceed to the next issue.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Tribe is a federally recognized, self-governing, sovereign Indian tribe. The Tribe consists of three confederated Indian tribal groups: the Warm Springs, the Wasco and the Paiute. Pursuant to the 1855 Treaty, the Tribe ceded approximately 10 million acres of land to the United States and reserved approximately 640,000 acres for exclusive use and occupation of the Tribe and its members as a permanent homeland (“Warm Springs Reservation”). The Tribe is a governmental co-manager of the Deschutes Basin and possesses significant sovereign, cultural, and treaty-reserved interests in the Deschutes Basin.</p> <p>The Tribe, as a resource co-manager, states further technical review is necessary before the Applicant’s proposal can be resolved as containing sufficient evidence to meet the “no net loss” standard.</p>	<p>The Tribe did not participate as part of the Hearings Officer review. For this reason, there are no Hearings Officer findings on this issue.</p>	

<ul style="list-style-type: none"> • The Applicant argues the Tribe seems to not understand the relevant test, stating in submittals that each and every stretch of every water way must have a net benefit. That is not the test. The test is whether there is a no net loss to the entire system. • Appellant Gould argues CTWS has appeared in this proceeding and requested consultation based on treaty rights. Such consultation should occur and then the outcome must be subject to the public review process. • The Tribe argues the proposed changes to the FWMP directly affects its co-management responsibilities and its sovereign interests in the affected resources. • The Tribe states it is widely acknowledged that the Tribe is a co-manager of the fishery resources in the basin. The resource therefore includes Tribally-managed resources including the Tribe's treaty-reserved rights to fish which includes the necessary habitat to support the fisheries. The Tribe is the sole manager that can evaluate impacts to its treaty-reserved fisheries resource. Neither the County, ODFW, USFWS, NMFS or any other entity has the expertise or knowledge to evaluate how habitat degradation affects or causes loss to this resource, and its cultural and subsistence significance to the Tribe. • The Tribe states that it possesses sufficient expertise to review strategies for protecting fish and fish habitat, as well as to promote anadromous fish recovery through habitat restoration, and this is recognized in the County's policies which rely in part on coordination with stakeholders to support healthy native fish populations through fish habitat management and restoration (see Deschutes County Comprehensive Plan (DCCP) Section 2.5, Goal 4, Policy 2.5.14). 		
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ISSUE 6

6. Are Thornburgh's water rights considered "reliable" and/or "wet water" for the purpose of evaluating the "no net loss" standard? Yes or No?

BOCC Decision Options:
Yes = The BOCC may *approve* the Applicant's request and the BOCC can proceed to the next issue.
No = The Applicant's request is *denied*. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Applicant proposes to transfer an assortment of water rights to the Resort's property to be used for both the Resort's water supply and mitigation obligations under the 2022 FWMP. The parties disagree on whether these water rights are "wet water" or "paper water". The parties also disagree on whether the water rights to be transferred have been used historically and can be relied upon to provide the needed fish mitigation.</p> <ul style="list-style-type: none"> • The Applicant argues it is entirely appropriate to rely upon existing certificated water rights as "wet water". ORS 537.270 provides that a water right certificate "shall be conclusive evidence of the priority and extent of the appropriation therein described in any proceeding in any court or tribunal 	<p>The Hearings Officer did not make clear findings on this issue.</p>	

of the state, except in those cases where the rights of appropriation thereby described have been abandoned subsequent to issuance of the certificate.”

- The Applicant argues all the Thornburgh water rights are wet water as defined by Mr. Lambie (Gould’s Water Expert) and Newton (Applicant’s Water Expert), both Certified Water Rights Examiners (“CWRE”), as water rights that govern water that is actually available.
- The Applicant argues they have submitted substantial evidence into the record and to ODFW to demonstrate the reliability of their proposed water rights to be transferred. Additionally, no other party showed any evidence to the contrary.
- The Applicant argues ODFW is not an expert on water law. Therefore, the arguments presented by ODFW regarding water law do not constitute expert evidence and ODFW’s testimony, as it relates to the reliability of water, must be rejected because they are not supported in law or fact.
- The Applicant argues transferring the water rights to the Resort and discontinuing this future potential use provides a full benefit to area waterways.
- Appellant Gould, ODFW, Lipscomb, and opponents argue the proposed mitigation is “paper water” that will not provide the needed mitigation water to the impacted rivers and streams. For this reason, the Applicant’s 2022 FWMP does not ensure the “no net loss” standard is met.
- Appellant Gould argues the 2022 FWMP presents a new suite of water rights, none of which currently provide available water for the resort’s consumption.
- ODFW argues when evaluating the potential impacts of any project the modeling baseline needs to include past use of the groundwater and surface water right certificates prior to transfer to the Applicant, and prior to use at the Thornburgh Resort.
- ODFW does not support the Tree Farm or Dutch Pacific rights as having regular past use and the LeBeau right was found to only have partial use. As these water rights are included in the 2022 FWMP benefits, ODFW must conclude that under the current version of the 2022 Plan, there may be a potential net loss to the system and potential impact to the resource.
- The Tribe argues the 2022 FWMP does not principally rely on instream water rights. It, instead, uses a unique “transfer strategy,” that is both difficult to understand and not sufficiently vetted for fish and wildlife mitigation purposes.
- COWL argues Thornburgh is proposing to switch from G-17036, a permanent source of water, to temporary water use authorizations, almost all of which will expire in 5 years or less, with no permanent water supply for the resort to rely upon.

ISSUE 7

7. Have the “no net loss” mitigation requirements been met for Whychus Creek? Yes or No?

BOCC Decision Options:

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>FMP Condition 39 was established to mitigate the Resort’s summer pumping impacts on Whychus Creek. To satisfy FMP Condition 39, the Applicant has submitted an executed Agreement with the Three Sisters Irrigation District (TSID). The parties disagree on whether this mitigation fully mitigates the impacts to Whychus Creek.</p> <ul style="list-style-type: none"> • The Applicant argues the Whychus Creek mitigation requirements are met and no additional mitigation is needed. • The Applicant argues the Whychus Creek mitigation requirements have been settled by approval of the FMP and LUBA found TSID water mitigates for all resort impacts to Whychus Creek, including Lower Whychus Creek. • The Applicant argues ODFW are not the experts on water law or on issues related to the modeling of water quality. Thornburgh’s technical team are experts on those issues and have shown that the 2022 FWMP provides protection of cold, spring-fed water in close proximity to the points of impact of Thornburgh’s water use. • The Applicant argues extensive modeling shows the Dutch Pacific water is providing additional flow and thermal benefits to Whychus Creek. OWRD’s denial of a transfer does not mean that not pumping it does not offer the mitigation benefits to the no net loss standard. Whether transferred or cancelled or not, it offers documented benefits to habitat and achieve compliance with the no net loss standard. • The Applicant argues providing cool water upstream (TSID mitigation), even though it warms, results in lower water temperatures in Lower Whychus Creek. This issue has been litigated and settled. • Appellant Gould argues the prior TSID mitigation is not universal mitigation for impacts on Whychus Creek and the 2022 FWMP must offset the Resort’s actual impacts to Whychus Creek. • ODFW argues if impacts are anticipated to groundwater spring discharge and water quality in Lower Whychus Creek in late summer, it is not sufficient to simply add a small amount of water upstream in Whychus Creek that warms as it travels downstream to offset degradation of an important cold, groundwater resource. Mitigation should be reliable, in-kind, and in-proximity to truly offset impacts. 	<p>The Hearings Officer did not make clear findings on this issue.</p>	

- ODFW argues the Applicant’s modeled vs. observed water temperature data for Whychus Creek appears have a poor fit with the Upper Deschutes Water Council observed temperatures from 2016.
- The Tribe argues Whychus Creek supports Middle Columbia River (MCR) steelhead and the fishery resource needs stream temperature restoration within a specified time period, the achievement of which is uncertain and based on assumptions that pertain to decisions like the one facing the County with the Resort’s proposal.
- The Tribe understands that the Applicant asserts that the proposal fully mitigates the current baseline, but even if this assertion proves to be accurate, this is a unique situation where there is federal regulatory information that the baseline resource need is actually higher and for ESA liability purposes this is expected to be met over time.

ISSUE 8

8. Does the Board find the “excess mitigation” measures in the 2022 FWMP provide additional mitigation beyond the Resort’s “no net loss” requirements? Yes or No?

BOCC Decision Options:

The 2022 FWMP includes “excess mitigation” measures that are not required to be implemented for the Board to find the Applicant has demonstrated the “no net loss” standard is met. However, the Applicant could rely on these measures in the future. For this reason, staff recommends the Board make clear findings on whether these “excess mitigation” measures can be used to satisfy the “no net loss” requirements.

The Board’s decision on this issue does not result in an approval or denial.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The 2022 FWMP states the Resort will rely on water right transfers to satisfy the “no net loss” standards. Additionally, the Applicant’s submitted materials and the proposed 2022 FWMP includes three “excess mitigation” measures and assigns a volume of water savings associated with each of these measures as follows:</p> <ol style="list-style-type: none"> 1. Advanced mitigation by leaving water rights instream or in the aquifer until needed for Resort uses <i>(Reduction varies depending on which water rights the Resort is using – Today 1,116.7 AF)</i> 2. Thin juniper forests onsite and on BLM lands <i>(Reduction of 304 AF to 912 AF)</i> 3. Discontinue the exempt use of all three exempt wells location on the Resort Property <i>(Reduction of 3.65 AF)</i> 	<p>The Hearings Officer did not make specific findings on this issue.</p>	<p>The 2022 FWMP states these measures are not required to meet the no net loss standard. However, it is unclear to staff how the Applicant may use or rely upon these “excess mitigation” benefits in the future.</p> <p>Staff recommends the Board make a finding that a determination on the quantifiable effectiveness of these measures is not required at this time. Staff also recommends the Board find the Resort must obtain land use approval, through a separate land use review, if these any of these measures will be necessary to achieve the “no net loss” standard in the future.</p>

The 2022 FWMP includes two exceptions for when water can be used instead of leaving the water rights instream. All three of these “excess mitigation” measures are optional unless the Applicant proposes to change the required mitigation measures in the future.

- The Applicant argues the excess mitigation measures must be accounted for and considered a benefit.
- The Applicant argues the no net loss standard refers to the “net” which is a total of the accounting of the benefits or mitigation being provided less the total of the impacts created. In compiling the net, it is reasonable to add all benefits and then subtract the total of all the impacts.
- The Applicant argues the advance mitigation benefits are credible. This will offer stream and river benefits in excess of Resort impacts for a significant period of time. The fact that this is a benefit to fisheries habitat is undeniable.
- The Applicant argues it is obvious that placing new water instream before it is being used will provide flow and temperature benefits for habitat, and this is properly considered an excess benefit of the mitigation program. The mitigation program, without this benefit, has been shown to meet the no net loss test.
- The Applicant argues the evidence shows Thornburgh is undertaking a substantial treatment program as part of the wildlife mitigation plan, which can provide water savings of between 304-912 AF annually, a portion of which can increase discharge for a period of at least 14 years. While this is likely to provide water savings, the applicant did not rely on it to meet the no net loss standard.
- Appellant Gould argues juniper removal does not result in replenishment of the aquifer; the Applicant has not obtained BLM's approval of this plan; and it is unclear on this record whether the areas proposed for juniper removal have already occurred by BLM's management of its own land.
- Appellant Gould argues the Applicant's own data overstates the alleged water savings because the juniper densities have changed since 2013.
- Appellant Gould argues the proposal to remove juniper lacks detail and implies that all juniper over 10" diameter could be removed, and that would include old growth juniper. A more specific plan would assess what is actually happening on the ground akin to how BLM approached its thinning proposal in 2012 related to fire management.
- The Tribe argues the Applicant's reliance on the timing of mitigation and on juniper removal activities are not the kinds of excess mitigation that are relevant for mitigation credits.
- The Tribe argues excess mitigation should not be considered because it is simply a feature of the 2022 transfer strategy; it is not a result of a mitigation action; and its benefits are not assured.
- The Tribe argues juniper removal activities are part of a landscape management plan and while there may be localized water resource benefits, it is not a stand-alone water mitigation strategy and is not a permanent benefit.
- Opponents question the efficacy of juniper removal in the Deschutes Basin and believe the Applicant has overstated the benefits to the Deschutes Basin aquifer.

ISSUE 9

9. Does the 2022 FWMP ensure ongoing compliance & sufficient monitoring? Yes or No?

BOCC Decision Options:

Given the complexity of this question, the Board may wish to review *Issues 10-12* below before making a decision on *Issue 9*. These more detailed sub-issues are related to the 2022 FWMP ongoing compliance and monitoring requirements and may help the Board develop their final position on *Issue 9*.

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The requirements of the 2022 FWMP will be implemented over the lifetime of the Thornburgh project and the County will be responsible for ensuring the 2022 FWMP requirements are met. Section D of the 2022 FWMP establishes the compliance and reporting requirements.</p> <ul style="list-style-type: none"> • The Applicant argues the compliance and reporting measures of the 2022 FWMP, and proposed Conditions 38 (revised) and 40, are sufficient to assure compliance with the FWMP and, consequently, the “no net loss” standard. • The Applicant argues the proposed compliance and reporting requirements are clear and objective. • The Applicant argues Condition 40 will require review of replacement water rights to assure continued compliance with the “no net loss” standard. Additionally, the Applicant states the language contained in Condition 40 was “accepted” by ODFW. • The Applicant argues the measures provided in the 2022 FWMP are feasible and not precluded by law. • The Applicant argues ODFW’s position that the mitigation water needs to be permanently protected in-stream is based on convenience for tracking purposes and is not required to demonstrate compliance. • The Applicant argues the no net loss standard does not require monitoring. All the water rights are already owned and, in almost all cases, the mitigation is already being provided. The annual reporting detailed in the FWMP (agreed to by ODFW) will ensure the benefits are maintained over time. • The Applicant argues Deschutes County should rely upon the Applicant’s technical reports and analysis that demonstrate the 2022 FWMP plan works today and works in to the future. • Appellant Gould argues it is improper to defer the FWMP compliance review to OWRD. Proof of compliance should be shown at the site plan stage to comply with DCC 18.113.070(K) to establish water is available to serve the use and DCC 18.113.070(D) to establish wet water is available to mitigate the consumption. 	<p>The Hearings Officer made the following findings related to this issue:</p> <ul style="list-style-type: none"> • The Hearings Officer found that unless clear, objective and enforceable compliance language is included in the 2022 FWMP, or a meaningful modification of the existing Condition 38, there can be no assurance that the 2022 FWMP is “likely or reasonably certain to succeed.” • The Hearings Officer found that Applicant did not propose modifying the language of Condition 38 and if it did, the Hearings Officer could not find it in the proposed 2022 FWMP. • The Hearings Officer found the submitted materials do not provide clear, concise and objective compliance standards to assure that the 2022 FWMP will secure the water rights represented in the 2022 FWMP. 	<p>The 2022 FWMP compliance language under subsection (D)(1) includes several options that in staff’s opinion are unclear and may be difficult for the County to enforce. For example, the Applicant only has to provide evidence they have <i>submitted</i> an application to OWRD for a water rights transfer to be in compliance.</p> <p>Based on the evidence in this record, it can take years for water right applications to be reviewed by the OWRD. If the transfer is ultimately not approved, the County may not become aware until an annual report is provided with an updated status of the water rights transfer OWRD application. During this time, the Resort could presumably be drawing water from their groundwater wells without the necessary mitigation water to offset the impacts.</p> <p>Under the 2022 FWMP compliance and reporting section, it is also unclear what OWRD water right review status would result in the Resort being out of compliance. To the extent, the water right status is out of compliance, the County will have to rely on the County’s Code Compliance process, proceed with a revocation review of the Resort’s approval, or take some similar action. This could result in additional legal proceedings and delay</p>

<ul style="list-style-type: none"> • Appellant Gould argues the compliance provisions for groundwater appropriation lack clear, objective, concrete, comprehensible, and recognizable terms. The FWMP should be certain and explicitly state the Resort must prove it has the mitigation water at the third stage approval or that land use permit will be denied. • Appellant Gould argues the Conditions of Approval must explicitly state that compliance is required to be shown before the land use permits are approved, so that the public has a right to verify that the conditions in the FWMP can be met. • ODFW states one of their main concerns with the proposed approach is that mitigating with groundwater transfers provides no assurances that groundwater discharge from ecologically important seeps, springs and surface water flows are protected into the future. • ODFW argues a successful monitoring program would track the implementation of mitigation commitments; determine whether they are performing as designed; and includes recourse for parties to reconvene if the expected outcomes and environmental effects and not being achieved. 		<p>achievement of the “no net loss” standard. Additionally, it is unclear what happens if the Resort is not able to obtain an alternative water right and/or the time frame in which they have to do so.</p> <p>Lastly, it is unclear to staff why the Applicant has included the three excess mitigation measures in the 2022 FWMP compliance and reporting section. The Applicant states these mitigation measures are not necessary to comply with the “no net loss” standard. Similar to the number of required golf courses for the Thornburgh Resort, it appears the Applicant does not have any obligation to complete these excess mitigation measures and it is unclear why the County would need to receive reports on these elective measures. For this reason, staff is unsure what the County is obligated to review and take action on when information on these optional measures is submitted. Additionally, including reporting requirements for these elective measures may lead to unnecessary appeals or Code Compliance complaints.</p>
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ISSUE 10

10. Are the proposed water rights that will be used for the Resort’s water supply and mitigation reasonably certain to be approved for transfer by the OWRD? Yes or No?

BOCC Decision Options:
Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.
No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Applicant’s mitigation relies on the OWRD approving the water rights for use by the Resort. It is the Applicant’s burden to demonstrate their proposal is feasible, and is likely and reasonably certain to assure that the DCC 18.113.070(D) “no net loss” standard is met.</p>	<p>The Hearings Officer made the following findings related to this issue :</p> <ul style="list-style-type: none"> • The Hearings Officer found the submitted materials do not provide clear, concise and objective compliance standards to assure 	

- The Applicant argues all proposed water rights allow the holder of the permit to pump actual water from the ground or waterways in the full amount allocated.
- The Applicant argues OWRD Permit G-17036 is “non-cancelled”, and per LUBA and the Court of Appeals, this satisfies Condition 10. Additionally, the Applicant argues the Court of Appeals had found the 2008 FWMP is not dependent on G-17036.
- The Applicant argues OWRD has approved a temporary transfer of the Tree Farm water right to the Resort.
- The Applicant argues the mitigation water will be permanently protected through OWRD’s program commonly referred to as “cancellation in lieu of mitigation”.
- Appellant Gould argues the Applicant incorrectly asserted that Ms. Gould's water supply availability allegations were resolved by rulings of LUBA, the Court of Appeals, and the Oregon Supreme Court in Ms. Gould's appeals of Thornburgh's site plan and tentative plan applications.
- ODFW argues under ORS 537.270 that appropriation is the amount of water assigned to a landowner/land. Being appropriated water offers no guarantees that the amount appropriated is available for use at any given time (this is why Oregon has a seniority system that relies on regulation) or that the use would not at any one time injure a senior right or degrade the environment.
- The Tribe argues the Applicant failed to provide clear, concise and objective compliance standards to assure the 2022 FWMP will secure the necessary water rights.
- The Tribe argues in the event the County ultimately determines that the proposal meets the County’s “no net loss” standard, it must acknowledge that the water source plan is still pending approval by OWRD which, importantly, is not assured.
- The Tribe argues there is evidence in the record that one of the water right transfer requests has been denied or is recommended for denial; that the water right transfers are otherwise contested; and that OWRD has recognized that ongoing groundwater pumping is a contributing factor in markedly declining groundwater levels in the area of the Resort.
- COWL argues prior legal decisions on the status of OWRD Permit G-17036 did not include the July 2022 OWRD orders denying an extension for G-17036 and denying a replacement permit for G-17036. Those July 2022 orders confirm opponents’ arguments that G-17036 has expired, cannot be replaced, and will not be extended, because the groundwater use is no longer within the capacity of the resource.

that the 2022 FWMP will secure the water rights represented in the 2022 FWMP.

- The Hearings Officer found the Applicant failed to carry its burden of proof requirement that its proposed 2022 FWMP meets relevant approval criteria.

ISSUE 11

11. Does the 2022 FWMP ensure the proposed mitigation water will be permanently protected in-stream? Yes or No?

BOCC Decision Options:

Yes = The BOCC may **approve** the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is **denied**. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>All parties appear to agree that the required mitigation water must be permanently protected instream for the “no net loss” standard to be met. However, there are disagreements on what is required for water to be permanently protected.</p> <ul style="list-style-type: none"> • The Applicant argues the mitigation water will be permanently protected through OWRD’s program commonly referred to as “Cancellation in Lieu of Mitigation”. • The Applicant argues both their water expert and Appellant Gould’s water expert agree voluntary cancellation is an acceptable form of OWRD mitigation. • The Applicant argues ODFW’s issue is that they will only accept a single method of protecting in stream flows, whereas the water law provides for additional measures. ODFW disregards other methods the evidence shows are protected, i.e.: Cancellation in lieu of mitigation or “Offset and Voluntary Cancellation Option”. • Appellant Gould, ODFW, The Tribe, COWL, Lipscomb, and additional opponents argue the 2008 FWMP was based on a singular groundwater right for the Resort’s water supply and required permanently protected in-stream mitigation. The Applicant’s current proposal includes the transfer of both surface and ground water rights for the Resort’s water supply, and the 2022 FWMP does not demonstrate mitigation water will be permanently protected in-stream. • Appellant Gould argues Thornburgh’s purported compliance provision is a made-up cancellation of surface water right "in-lieu of mitigation," but there is no such mechanism in Oregon water rights law. • Appellant Gould argues cancellations are not available for the mix of water rights included in the proposed FWMP, and even if such mechanism could be used, cancellation does not necessarily result in actual wet water mitigation because a junior water right holder can then use the amount left in the ground or on the surface. While cancellation extinguishes a paper right to water, it will not reliably result in the mitigation certainty that the no net loss/degradation standard requires. • ODFW maintains that cancellation or transfer of a water right provides no legal protection to instream flow and the benefits it provides to the resource. 	<p>The Hearings Officer found the submitted materials do not provide clear, concise and objective compliance standards to assure that the 2022 FWMP will secure the water rights represented in the 2022 FWMP.</p>	

- ODFW argues the 2022 Plan relies on voluntary cancellations, commitment of non-use, submittal of a transfer applications to OWRD, and other such actions in lieu of mitigation that do not legally and permanently protect water instream or provide security into the future.
- The Tribe argues the Applicant relies on the concept of “cancellation in lieu of mitigation”. Cancellation of a water right does not, as a matter of law, legally protect any water instream for any instream use. The Tribe simply does not understand how the Applicant can demonstrate any reasonable assurance of mitigation benefit of a cancelled water right.

ISSUE 12

12. Do the Applicant’s proposed FMP Conditions 38 & 40 ensure ongoing compliance with the “no net loss” standard? Yes or No?

BOCC Decision Options:

Yes = The BOCC may *approve* the Applicant’s request and the BOCC can proceed to the next issue.

No = The Applicant’s request is *denied*. No additional issues in the matrix need to be addressed.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Applicant proposes to revise FMP Condition 38 and add a new FMP Condition 40 to ensure ongoing compliance with the “no net loss” standard. Below are the current and proposed conditions with the <u>underlined</u> text indicating where language has changed and the strikethrough text indicating where language has been deleted.</p> <p><i>Current FMP Condition 38:</i> The applicant shall abide by the April 2008 Wildlife Mitigation Plan, the August 2008 Supplement, and agreements with the BLM and ODFW for management of off-site mitigation efforts. Consistent with the plan, the applicant shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year. The mitigation measures include removal of existing wells on the subject property and coordination with ODFW to model stream temperatures in Whychus Creek.</p> <p><i>Proposed Revised FMP Condition 38 (February 1, 2023):</i> <u>Thornburgh</u> shall abide by the April 2008 Wildlife Mitigation Plan, the August 2008 Supplement <u>as amended by the 2022 Plan</u>, and <u>all</u> agreements with the BLM and ODFW for management of offsite mitigation efforts. Consistent with the plan, <u>Thornburgh</u> shall submit an annual report to the County detailing mitigation activities that have occurred over the previous year.</p> <p><i>Proposed Revised FMP Condition 38 (Applicant’s Final Argument):</i> <u>Thornburgh</u> shall abide by the April 2008 Wildlife Mitigation Plan (<u>excluding the April 21, 2008 FWMP addendum to that plan and its addenda</u>), and <u>all</u> agreements with the BLM and ODFW for management of</p>	<p>The Hearings Officer found the current FMP Condition 38:</p> <p style="padding-left: 40px;">“[R]equires the Applicant to ‘abide by the April 2008 Mitigation Plan...and agreements with the BLM and ODFW for management of off-site mitigation efforts.’ Hindsight is 20/20 and had the hearings officer and other decision makers involved with the FMP and FWMP approval process had been aware of the challenges the language contained in those decisions has caused she/they may have imposed more definitive and objective language in those documents.”</p> <p>The Hearings Officer also found that current Condition 38 requires coordination with ODFW to model stream temperatures. The Hearings Officer, based on the evidence in the record, is uncertain if that provision remains relevant.</p>	<p>It does not appear ODFW “accepted” the language in the proposed FMP Conditions 38 and 40 as indicated by the Applicant. ODFW’s January 31, 2023 comments state:</p> <p style="padding-left: 40px;">The applicant has been working with ODFW to reach agreement on proposed language that would ensure compliance, <i>but we were unable to reach consensus as of the date of this letter</i>. ODFW is happy to continue working with the applicant, as time allows. [Emphasis added]</p> <p>Since the issuance of these comments, ODFW has continued to express concerns and raise objections that the Applicant’s proposal does not ensure compliance with the “no net loss” standard.</p> <p>Additionally, staff does not recommend the BOCC adopt the Applicant’s Final Argument proposed conditions FMP Condition 38 and 40 in their entirety. Specifically, staff does not recommend combining the review of any additional changes to</p>

offsite mitigation efforts. Consistent with the plan, Thornburgh shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year.

Proposed New FMP Condition 40 (February 1, 2023):

Thornburgh shall comply with the 2022 Fish and Wildlife Mitigation Plan, including its compliance and reporting mechanisms found in Section II of that plan.

Proposed New FMP Condition 40 (Applicant's Final Argument):

Thornburgh shall comply with the 2022 Fish and Wildlife Mitigation Plan, including its compliance and reporting mechanisms found in Section II of that plan. If Thornburgh proposes to further change the source of water or mitigation it may do so during a land use proceeding as part of a third stage development application under DCC 18.113.040(C), so long as evidence in the record shows that the change will not result in a violation of the no net loss standard.

- The Applicant argues the FMP Conditions 38 and 40 language are acceptable to ODFW and ODFW agreed these conditions would provide clear compliance and reporting language. The Applicant cites the record material submitted by ODFW on January 31, 2023, as the basis for this statement.
- The Applicant argues they have made no changes to the compliance language ODFW accepted. That language is included in the FWMP. The new Condition 40 ensures compliance.
- Appellant Gould argues the proposed 2022 FWMP, and Conditions 38 and 40, fail to provide reasonable certainty that the Resort will comply with the “no net loss” standard.
- Appellant Gould argues the proposed Condition 38, fails to explain the compliance and reporting requirements in a concise and clear manner so future persons can understand what the responsibilities are at each stage.
- Appellant Gould argues the Condition 38 language led to years of litigation regarding different possible interpretations, for which the Hearings Officer in this project has already complained about on this record.
- ODFW contends that current language regarding voluntary cancellations, commitment of non-use, submittal of a transfer application to OWRD, and other such actions in lieu of mitigation do not legally and permanently protect water instream.
- ODFW states the Applicant and their Agency agree that water cannot be utilized at the Resort until water rights are finalized (e.g., Final Orders have been issued by OWRD) and impacts to the resource are mitigated, but mitigation utilizing surface water quality and quantity must be replaced in perpetuity or for the life of the project as intended or continued pumping at the Resort would result in a net loss of the resource.

The Hearings Officer found that Applicant's statement that the current Condition 38 is “imprecisely worded” is an understatement.

Resort's source of water or mitigation with future Site Plan and/or Tentative Plan reviews (i.e. “third stage development applications”).

The Hearings Officer found Thornburgh's CMP approval deferred the FWMP decision to be made as part of the FMP. Therefore, any decision to change the FMP by changing the FWMP necessarily implicates the CMP. Additionally, the Hearings Officer found the proposed FWMP modification was a substantial change to the CMP.

Based on these findings, staff believes it would be inappropriate to combine the review of additional changes to the Resort's water sources and/or mitigation requirements with a Site Plan or Tentative Plan review. Staff believes these changes must be processed in the same manner as the subject modification request.

Moreover, the compliance and reporting sections of the 2022 FWMP would need to be updated to reflect changes the proposed water sources or mitigation requirements.

ISSUE 13

13. Does the Applicant's proposal impact the water availability CMP/FMP criteria? Yes or No?

BOCC Decision Options:

Yes = The Applicant's request is *denied*. No additional issues in the matrix need to be addressed.

No = The BOCC may *approve* the Applicant's request and the BOCC can proceed to the next issue.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>The Destination Resort zoning standards establish the following approval criteria under DCC 18.113.070(K):</p> <p style="padding-left: 20px;">Adequate water will be available for all proposed uses at the destination resort, based upon the water study and a proposed water conservation plan. Water use will not reduce the availability of water in the water impact areas identified in the water study considering existing uses and potential development previously approved in the affected area. Water sources shall not include any perched water table. Water shall only be taken from the regional aquifer. Where a perched water table is pierced to access the regional aquifer, the well must be sealed off from the perched water table.</p> <p>The parties disagree on whether the Applicant's proposal impacts this criterion and, if yes, whether the Applicant has addressed the requirements through this medication application.</p> <ul style="list-style-type: none"> • The Applicant argues the source of water is the regional aquifer pumped from wells on the Resort property and the source of water is not being changed – only the permits that authorize pumping from that source. • The Applicant argues per LUBA's decision in LUBA 2021-066, "in calling for 'updated documentation' for each phase of development, the text of FMP Condition 10 suggests that water sources and permits for the destination resort could potentially change following FMP approval." • The Applicant argues the Resort has no new plans for its water supply. It is agreeing to reduce its water use but is still obtaining water from the regional aquifer from wells on the Thornburgh property. It is only requesting approval to rely on additional water rights to allow water to be pumped at the Resort. • The Applicant argues the evidence also shows that G-17036 is valid and non-cancelled. • The Applicant argues transfer applications have been submitted for all the water rights and the first transfer application (Tree Farm) has been approved. • Appellant Gould argues the water supply requires resiliency, which means that the Resort, like a municipality, has a water supply with water available for a minimum of 10 years. Appellant Gould states the Applicant has pending applications for temporary water transfers that could only allow for a temporary 5-year water supply with no automatic or available extensions without a new application. 	<p>The Hearings Officer did not make clear findings on this issue, but found that if the 2022 FWMP were to be approved in this decision, that approval cannot be considered approval of any specific number of wells or any specific location of wells on the Thornburgh Resort property.</p>	

- Appellant Gould argues the Applicant's inability to obtain a permanent water supply that includes identification, analysis, and examination of well impacts means that the no net loss standard cannot be fully analyzed, nor can the impact of those wells on surrounding property owners' wells.
- Appellant Gould argues the FWMP is not the appropriate place to develop its water supply plan and its wastewater management plan; those plans in the CMP require revision for Applicant's new resort development plan, water demands and water sources to meet those demands.
- Appellant Gould argues the Applicant now proposes to use groundwater rights from outside the Deschutes Formation as a potential sources of paper water supply. Doing so changes the zones of impact from the resort's pulling of groundwater in the Deschutes Formation. Actual wet water mitigation to aquatic habitat impacts, especially the Crooked River, must be identified and assessed.
- The Tribe argues OWRD's process does not address fish and wildlife impacts and any changes in the water supply plan must undergo further County review given the direct impact such a plan will have on fish and wildlife resources.
- COWL argues the Resort's loss of a permanent water supply is "a substantial change to the approved plan" that requires a new application for a conditional use permit for a destination resort. The County should deny the 2002 FWMP application and require a new plan for a new CMP followed by a new FMP.
- COWL argues the Resort's CMP/FMP approval relied on water right permit G-17036 and this water right no longer provides proof of water availability in the form of a permanent water supply as it did when the Resort was approved.
- COWL argues no permanent water supply is available to the resort of the type represented by G-17036 and its Water Management and Conservation Plan. The temporary water transfers discussed in the current FWMP modification proposal are not comparable to the permanent water supply represented by G-17036.
- Opponents argue the OWRD has over allocated the Deschutes Basin aquifer and the severe drought conditions in Central Oregon require the Applicant to demonstrate the Resort currently has and will have the necessary water in the future.

ISSUE 14

14. Is Thornburgh's CMP Void? Yes or No?

BOCC Decision Options:

Yes = The Applicant's request is *denied*. No additional issues in the matrix need to be addressed.

No = The BOCC may *approve* the Applicant's request and the BOCC can proceed to the next issue.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>In 2009, the CMP received final approval after a series of appeals. In 2011, the Resort initiated a County review process to demonstrate the CMP approval was initiated. The County's decisions were appealed numerous times and a final remand decision was never issued.</p> <ul style="list-style-type: none"> • The Applicant argues LUBA held that the FMP "has effectively incorporated and displaced the CMP approval." LUBA did not find that the CMP is void. • The Applicant argues this is an impermissible collateral attack on the resolution of this issue by the <i>LUBA FMP 2016 Decision</i>. • The Applicant argues the provision of ORS 215.435 that terminates an application if a review on remand is not requested within 180 days of the final resolution of judicial review was not effective until after LUBA issued its remand decision. This law may not be applied retroactively because to do so would prejudice the Applicant in that case by voiding that application. • Appellant Gould argues LUBA concluded the CMP approval is void. For this reason, the Applicant has nothing to amend. • Appellant Gould also argues the Applicant's CMP has not been initiated, is void, and there is no CMP to amend. 	<p>The Hearings Officer, based upon a review of the record and relevant appellate decisions, found that there is no substantial evidence or persuasive legal authority in the record of this case to allow the Hearings Officer to conclude that the CMP is "void." As such, the Hearings Officer found the CMP is not "void" and that the Applicant's modification proposal may be processed in this case.</p>	

ISSUE 15

15. Is the Applicant's proposal a "substantial change"? Yes or No?

BOCC Decision Options:

Yes = The Applicant must address the CMP criteria that will be impacted by the Applicant's proposal.

No = The Board finds the CMP is not implicated by this request and the Applicant does not need to address all criteria related to the CMP approval.

The BOCC's decision on this issue does not result in an approval or denial of the Applicant's request.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>DCC 18.113.080 establishes any <i>substantial change</i> proposed to an approved CMP must be reviewed in the same manner as the original CMP. A <i>substantial change</i>, under this section, means an alteration in the type, scale, location, phasing or other characteristic of the proposed development such that findings of fact on which the original approval was based would be materially affected.</p> <p>CMP/FMP Condition 1 states "Approval is based upon the submitted plan. Any <i>substantial change</i> to the approved plan will require a new application."</p> <ul style="list-style-type: none"> • The Applicant argues the proposed reduction in water use and or deletion of an optional golf course is not a "substantial change" to the CMP or under CMP/FMP Condition 1. • The Applicant argues no finding of the approved CMP addresses the particulars of the 2008 FWMP. As a result, no findings in the CMP decision are affected by a revised FWMP. • The Applicant also argues the changes in the source of mitigation water from the 2008 FWMP to the 2022 FWMP is merely a change to a plan that mitigates for the impacts of the proposed development. It does not change the proposed development or the characteristics of it beyond placing a greater restriction on the maximum amount of water used and the number of optional golf courses that may be developed. • The Applicant argues the recreational amenities plan approved by the CMP does not require that all listed recreational amenities be provided. Only one golf course is required to meet recreational amenity approval criteria. • The Applicant argues the modification did not change the volume of open space. The approved Tentative Plans and Site Plans show the approved open space and provide one golf course in the same general area where two where two courses were allowed. • The Applicant argues the Sewer Master Plan is not implicated by changes to the 2022 FWMP. • The Applicant argues the impacts of building a golf course identified by the Tribe other than a reduction in water use relate to the terrestrial WMP; not the FWMP. 	<p>The Hearings Officer found the Applicant's proposed modification to the FWMP mitigation water sources is a "substantial change" to the CMP and under CMP/FMP Condition 1.</p> <p>The Hearings Officer found the sources of the FWMP mitigation water is a "characteristic" of the proposed development (i.e. the Thornburgh Resort) and the proposed changes would materially affect the FMP findings related to the FWMP. Further, the Hearings Officer found "any decision to change the FMP by changing the FWMP necessarily implicates the CMP".</p> <p>The Hearings Office also found the Applicant's proposal to modify the CMP/FMP water usage or elimination of an optional golf course is not a "substantial change".</p>	

- Appellant Gould argues the Hearings Officer erred in his interpretation of the phrase “substantial change” by “harmonizing” the code provisions with the conditions of approval in a way to limit the changes he would consider under the test.
- Appellant Gould argues removal of, or agreement not to build, a golf course requires changes to the Resort’s Sewer System Master Plan and Water System Master Plan. Appellant Gould further argues the Applicant’s request includes additional “substantial changes” beyond what the Hearings Officer addressed in his decision.
- The Tribe argues the elimination of, or agreement not to build, a golf course may be a “substantial change”. The Tribe states they have not had sufficient time to understand how Applicant proposes to manage the development area that would have served as a golf course and thus whether there are significant wildlife impacts to the replacement management.

ISSUE 16

16. Are the “surrounding properties”, when considering impacts associated with a modification request, limited to adjacent properties? Yes or No?

BOCC Decision Options:

Yes = “Surrounding properties” under DCC 22.36.040 only includes adjacent properties.

No = “Surrounding properties” under DCC 22.36.040 is specific to the modification request and subject property.

If the Board votes “No”, the Board will need to determine what are the “surrounding properties” for the Applicant’s modification request.

- **Option 1 = Adjacent Properties**
- **Option 2 = To be determined by BOCC**

The BOCC’s decision on this issue does not result in an approval or denial of the Applicant’s request.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>A modification request under the County’s modification standards cannot result in significant additional impacts on “surrounding properties”. Therefore, the County must establish what the surrounding properties are before analyzing the potential impacts.</p> <ul style="list-style-type: none"> • The Applicant argues the Board should not make an application-specific definition or interpretation of the Code. • The Applicant agrees with the hearings officer, that “surrounding properties,” as used in DCC 22.36.040(C), literally means the real property ownerships that are directly adjacent to (surrounding) the Thornburgh Resort property. • The Applicant argues this is a reasonable impact area considering the Resort adjoins large tracts of land owned by governmental entities and one 80-acre property owned by a private owner. 	<p>The Hearings Officer agrees with Applicant that “surrounding properties,” as used in DCC 22.36.040(C), literally means the real property ownerships that are directly adjacent to (surrounding) the Subject Property.</p>	<p>Staff recommends the Board find “surrounding properties” is specific to the modification request and subject property.</p> <p>To broadly apply the Applicant’s/Hearings Officer’s interpretation will likely result in unintended consequences. For example, a subject property could have a 5-foot wide common area abutting one or more sides. Under the Hearings Officer’s interpretation, the County would be precluded from considering impacts on properties on the opposite site of the 5-foot wide common area,</p>

<ul style="list-style-type: none"> Appellant Gould argues the Hearings Officer too narrowly defined “surrounding properties” and many nearby, but nonadjacent properties, will have significant additional impacts associated with the subject request. Appellant Gould argues the Applicant’s request will result in significant additional impacts to well on surrounding properties. For this reason, the Applicant’s request is not allowed. 		<p>because these properties are not <i>adjacent</i> to the subject property.</p> <p>This criterion focuses on impacts on surrounding properties. For this reason, staff recommends the Board find ‘surrounding properties’ should be a project specific analysis based on expected impact area and not limited to merely adjacent properties.</p>
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ISSUE 17

17. Does the County’s newspaper notice need to be published 20 days prior to, not including the day of, the initial hearing? Yes or No?

BOCC Decision Options:
The BOCC’s decision on this issue does not result in an approval or denial of the Applicant’s request.

<i>Description</i>	<i>Hearings Officer Findings</i>	<i>Staff Comments</i>
<p>DCC 22.24.030 establishes notice of the initial hearing must be published in a newspaper at least 20 days <u>prior</u> to the hearing.</p> <ul style="list-style-type: none"> Applicant argues the Hearings Officer misinterpreted the published notice requirements for the initial hearing to require a 21-day notice period rather than a 20-day notice period. Applicant argues the Hearings Officer misinterpreted the published notice requirements for the initial hearing to require a 21-day notice period rather than a 20-day notice period. 	<p>The Hearings Officer found DCC requires the published notice be completed at least 20 days <u>prior</u> to the initial hearing and, in this case, the initial hearing <u>was</u> held on the 20th day. For this reason, the notice was not published 20 days <u>prior</u>.</p> <p>The Hearings Officer found no party was harmed and there was no procedural error.</p>	<p>Staff notes, for this application, there is no procedural error, because the Board conducted a second <i>de novo</i> appeal hearing, which afforded any potential harmed parties another opportunity to participate. Nevertheless, Board interpretation of this requirement will ensure County staff understand the notice requirements for future reviews.</p>

March 15, 2023

Kenneth Kataroff

Admitted in Washington and Oregon

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KKataroff@schwabe.com

VIA E-MAIL

Board of County Commissioners
c/o Caroline House, Senior Planner
PO Box 6005
Attn: BoCC
Bend, OR 97708-6005

RE: File No. 247-22-000678-MC; 247-22-000984-A; 247-23-000003-A;
Applicant's Final Legal Argument
Our File No.: 135849-262760

Chair Adair, Commissioners DeBone and Chang:

Enclosed is Applicant's Final Legal Argument provided in the form of a proposed final decision and attachments. Exhibit A is a chart of issues which must be included and generally responds to all substantive issues related to the no net loss criteria. Exhibit B is the final 2022 FWMP. We request that, besides potential clerical changes, the Board adopt this draft decision and attachments.

Sincerely,

SCHWABE, WILLIAMSON & WYATT, P.C.


Kenneth Kataroff

Enclosures

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DECISION OF THE DESCHUTES COUNTY BOARD OF COUNTY COMMISSIONERS

File Number: 247-22-000678-MC; 247-22-000984-A; 247-23-000003-A

Subject Property: The entirety of the Thornburgh Destination Resort located at:

Address	Deschutes Co. Assessor Map & Tax Lot Number
11800 Eagle Crest Blvd, Redmond, OR 97756	15-12-00, TL 5000
11810 Eagle Crest Blvd, Redmond, OR 97756	15-12-00, TL 5001
11820 Eagle Crest Blvd, Redmond, OR 97756	15-12-00, TL 5002
67205 Cline Falls Rd, Redmond, OR 97756	15-12-00, TL 7700
67705 Cline Falls Rd, Redmond, OR 97756	15-12-00, TL 7701
67555 Cline Falls Rd, Redmond, OR 97756	15-12-00, TL 7800
67525 Cline Falls Rd, Redmond, OR 97756	15-12-00, TL 7801*
67545 Cline Falls Rd, Redmond, OR 97756	15-12-00, TL 7900
67400 Barr Rd, Redmond, OR 97756	15-12-00, TL 8000**

* A portion of this tax lot is not included in the FMP.

** Portions of this tax lot are not included in the FMP.

Owners/Applicants: Central Land & Cattle Company, LLC, Kameron DeLashmutt, Pinnacle Utilities, LLC (collectively “Applicant”)

Applicant’s Attorneys: J. Kenneth Katzaroff – Schwabe Williamson & Wyatt
Liz Fancher – Attorney at Law

Staff Contact: Caroline House, Senior Planner – Deschutes County

Record: The official record was maintained by Deschutes County and accessible online through a project-specific website at:
<https://www.deschutes.org/cd/page/247-22-000678-mc-thornburgh-destination-resort-modification-cmpfmpfwmp>

Proposal: Applicant seeks to modify a discrete aspect of its final master plan (“FMP”) approval, namely the mitigation measures found in its Fish and Wildlife Mitigation Plan (“FWMP”). Applicant also seeks to modify FMP conditions to reflect that change and ensure compliance with the new FWMP. The proposal is referred to as the “Application.”

I. Applicable Criteria

Deschutes County Code (“DCC”)
Title 18, Deschutes County Zoning Ordinance:

Chapter 18.113, Destination Resorts Zone
Title 22, Deschutes County Development Procedures Ordinance:
Chapter 22.04, Introduction & Definitions
Chapter 22.08, General Provisions
Chapter 22.20, Review of Land Use Action Procedures
Chapter 22.28, Land Use Action Decisions
Chapter 22.36, Limitation on Approvals

II. Basic Findings

As described below (see Resort Land Use History), the Thornburgh Destination Resort (“Thornburgh” or the “Resort”) has been litigated for nearly 20 years. During that time period, the Board of County Commissioners (“Board”) has heard numerous appeals related to the Resort. The current Application seeks to modify a discrete supporting document to the Resort’s FMP. However, multiple parties have raised additional issues that are either outside of the scope of the Application, are not relevant approval criteria, have already been decided in prior proceedings and are binding, or otherwise do not provide a basis for denial of the Application. These arguments are addressed in detail in **Exhibit A**, which is expressly adopted as part of this decision and is meant to supplement the findings herein.

When referenced and unless otherwise noted the “Staff Report” refers to the Staff Report issued by Caroline House on October 17, 2022, in advance of the public hearing before the Hearings Officer.

A. Lot of Record

The Subject Property has been verified as a legal lot(s) of record in previous land use decisions including the Board’s 2006 decision approving the Resort’s CMP.

B. Location and Site Description

The Thornburgh Destination Resort (“Thornburgh” or “Resort”) is comprised of, generally, a large tract of land +/- 1,970 acres in size and includes several tax lots as identified above. The Subject Property is approximately 3 miles west-southwest of the City of Redmond. The Subject Property includes variable topography, native vegetation, rock outcroppings and ridge tops. At this time, the Subject Property is largely undeveloped land. However, the Applicant has started construction of access roads, other infrastructure improvements (i.e., community water system, community sewer system, etc.), and a golf course pursuant to final land use approvals. In addition, the Applicant has applied for and been granted building permits for utility facilities with additional permits pending. The southeastern corner of the subject property is bisected by Cline Falls Road and Barr Road bisects the southwest corner of the Resort tract.

C. Resort Land Use History

The hearings officer adequately captured the prior land use history related to the Resort. Since the hearings officer made his decision, two additional decisions were denied review by the Supreme Court of Oregon.

Gould v. Deschutes County, ___ Or LUBA ___ (LUBA No. 2022-013, June 1, 2022), *aff'd* 322 Or App 11 (2022) (“*Gould OLU*”), *rev den*, ___ Or ___ (S069882).

Gould v. Deschutes County, ___ Or LUBA ___ (LUBA No. 2022-011), *aff'd without op*, 322 Or App 383, *rev den*, ___ Or ___ (S069813).

D. Public Agency Comments

The Staff Report contained a summary of public agency comments submitted in to the record as of the date of that Staff Report. Additional comments from the Oregon Department of Fish & Wildlife (“ODFW”) were received during the appeal hearing before the Board and are addressed under relevant finding or in Exhibit A.

E. Public Comments, Testimony, and Record Submissions

As with any Thornburgh application, robust public participation occurred throughout the review of the Application. Relevant testimony is addressed under relevant findings and in Exhibit A.

F. Review Period and Procedure

The hearings officer detailed the proceeding before him. Both Thornburgh and Appellant Gould appealed his decision, and the Board accepted *de novo* review. After a hearing on February 1st before the Board, the open record period was left open for 14-days until February 15th. Following a joint request of the Applicant and the Confederated Tribes of the Warm Springs Reservation (“Tribe”)¹, the open record period was extended until March 1st, 2023. A rebuttal period was allowed consistent with the original record procedure for seven days until March 8th, with final legal argument due on March 15th. The Board issued an order updating these time periods.

Accounting for all waived time agreed to by the Applicant, the County’s 150-day clock is set to expire on April 10th, 2023.

G. Summary of Application

The Applicant seeks to replace the 2008 FWMP document with an updated 2022 FWMP.² A copy of the proposed 2022 FWMP in its final form is attached as **Exhibit B**. The Board understands that this is the final document has imposed a condition of approval that requires compliance with this document. The 2022 FWMP relies on Condition 39 of the FMP (TSID

¹ The Confederated Tribes of the Warm Springs Reservation refer to themselves as the “Tribe” and so we do the same.

² The 2008 FWMP is comprised of two documents, the April 21, 2008 Fish and Wildlife Mitigation Plan Addendum Relating to Potential Impacts of Ground Water Withdrawals on Fish Habitat and the August 11, 2008 letter from attorney Martha Pagel committing to take certain actions related to Whychus Creek.

mitigation project) to achieve compliance with the no net loss/degradation standard of DCC 18.113.070(D) for Whychus Creek. The Whychus Creek supplement to the 2008 FWMP is not modified by the 2022 FWMP.

The Applicant, in response to concerns expressed in the hearings officer's decision, also asks the Board to modify FMP Condition 38 and to impose a new FMP Condition 40 to clarify what constitutes compliance with the 2022 FWMP.

Current FMP Condition 38: “[Thornburgh] shall abide by the April 2008 Wildlife Mitigation Plan, the August 2008 Supplement, and all agreements with the BLM and ODFW for management of offsite mitigation efforts. Consistent with the plan, [Thornburgh] shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year. The mitigation measures include removal of existing wells on the subject property, and coordination with ODFW to model stream temperatures in Whychus Creek.”

Proposed Revised FMP Condition 38: “Thornburgh shall abide by the April 2008 Wildlife Mitigation Plan (excluding the April 21, 2008 FWMP addendum to that plan and its addenda), and all agreements with the BLM and ODFW for management of offsite mitigation efforts. Consistent with the plan, Thornburgh shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year.

Proposed NEW FMP Condition 40: Thornburgh shall comply with the 2022 Fish and Wildlife Mitigation Plan, including its compliance and reporting mechanisms found in Section II of that plan. If Thornburgh proposes to further change the source of water or mitigation it may do so during a land use proceeding as part of a third stage development application under DCC 18.113.040.C so long as evidence in the record shows that the change will not result in a violation of the no net loss standard.

H. Standard of Review – Substantial Evidence

Before addressing specific applicable criteria, the Board notes that the standard it must review the evidence under is the “substantial evidence” standard. Substantial evidence is evidence a reasonable person would rely on in drawing inferences and reaching a decision. *City of Portland v. Bureau of Labor & Indus.*, 298 Or 104, 119, 690 P2d 475 (1984). Substantial evidence includes, but is not limited to: staff reports/statements by staff, expert testimony addressing relevant issues, and technical reports. *See, e.g. Scott v. City of Portland*, 17 Or LUBA 197, 202 (1988); *Oberdorfer v. Harney County*, 64 OR LUBA 47, 50-51 (2011); *Boucot v. City of Corvallis*, 64 Or LUBA 131, 138-39 (2011). Bare assertions are not substantial evidence, and LUBA will affirm a county's decision where opponents cite to no evidence in the record to support their assertions. *See Comden v. Coos County*, 56 Or LUBA 214, 228 (2008). Additionally, when it comes to technical questions something more than lay testimony is necessary to rebut an expert's testimony, and ‘mere statement of a party's attorney does not provide the required evidentiary foundation necessary to support conclusions regarding such technical questions. *See, e.g., Oregon Coast Alliance v. City of Brookings*, 72 Or LUBA 222, 232-33 (2015).

In many instances, as have been discussed in Exhibit A or below, project opponents including Appellant Gould, ODFW, and the Confederated Tribes of Warm Springs (the "Tribe") have chosen not to provide evidence and, instead, simply critique matters of statewide water policy or the conclusions of Thornburgh's technical evidence. The Board is bound to make its decision based upon evidence in the record and if the only evidence shows compliance with applicable law and critiques are insubstantial, the Board must approve an application.

The technical expertise provided by Thornburgh's team is vast. We agree with the hearings officer that Thornburgh's technical evidence was prepared by credentialed experts who provided an extreme level of analysis and detail. Additionally, Thornburgh's team of experts includes experts with significant experience working in analyzing waterways in the Deschutes Basin; something Ms. Gould's experts lack. The Board finds that Appellant Gould's experts are less credible and not nearly as comprehensive. For example, Appellant Gould's attorneys (Ms. Bragar and Mr. Anuta) are not technical experts. And, while Mr. Lambie may be a CWRE and engineer, he is not a fish biologist nor does he have any wildlife or habitat related credentials. The opposite is true for Thornburgh's slate of experts, which include PH.ds in biology with special certifications in fisheries. *See* Table 2: Comparison of Experts. We find that the resumes included related to the Thornburgh's experts is persuasive as to their subject matter and technical expertise.

Similarly, ODFW and the Tribe have generally not provided expert opinion or analysis related to habitat impacts. As discussed below, most arguments or issues raised related to the 2022 FWMP meeting the No Net Loss Standard do not present biological or habitat related argument; they raise issues related to statewide water policy. This is addressed further below and in Exhibit A.

Table 2: Comparison of Expert Testimony				
Subject	Thornburgh Expert Testimony	ODFW Expert Testimony	Gould's Expert Testimony	Tribes Expert Testimony
Water Quality and Modeling	Dr. Kellie Vache , Ph.D, Water Resource Engineering. Has over 20 yrs experience, has modeled the Lower, Middle and Upper Deschutes and Lower Crooked Rivers and authored 60 scientific journals, articles, or books.	ODFW provided no expert testimony on water in any respect.	Mr. Lambie provided memo from E-Pur that dealt with elements of the GSFlow modeling.	The Tribes provided no expert testimony on water in any respect.
	Mr. Joe Eilers , Master of Science in Water Quality Management w/over 40 years of experience. A hydrologist who has authored 40 scientific journals and completed modeling on the Lower, Middle and Upper Deschutes River			
	Dr. Pradeep Mugunthan , Ph. D, Civil & Environmental Engineering with 20 yrs of experience. He is an expert at modeling groundwater-surface water interactions and modeling the effects of flow and water quality changes on aquatic habitat. He has authored 14 scientific papers, journals or publications.			
Water Rights & Mitigation Program	Mr. Jim Newton , Certified Water Rights Examiner, Registered Geologist, Registered Engineer. Over 20 years of experience with groundwater and related elements in the Deschutes Basin.	ODFW provided no expert testimony on water rights or the OWRD mitigation rules.	Mr. John Lambie , Certified Water Rights Examiner, Registered Geologist.	The Tribes provided no expert testimony on water rights or the OWRD mitigation rules.
Fish and Fish Habitat	Dr. Lucius Caldwell , Ph. D. Biological Sciences, and Certified Fisheries Professional w/13 yrs of experience regarding the instream flow and fish habitat disciplines, and has designed, led, or participated in dozens of studies and projects focusing on Pacific salmonids. Mr. Joe Eilers , in addition to his expertise on water quality listed above Mr. Eilers is a Certified Fisheries Biologist, and a Certified Lake Manager.	Mr. Gerald George , ODFW District Fish Biologist. Unaware of any specific education but have assumed Mr. George has such for fish.	NONE	NONE
Junipers	Dr. Tim Deboodt , Ph. D. Natural Resource Manager for Crook County. Formerly with OSU Extension service. Leading expert on Juniper trees and the relation to surface and ground water resources.	NONE	NONE	NONE

III. Findings & Conclusions

Where relevant, the Board specifically incorporates and adopts additional findings found in Exhibit A hereto.

All parties appear to agree that the most relevant criterion related to the Application is found at DCC 18.113.070(D) which provides that in order to approve a destination resort substantial evidence must be provided that “any negative impact on fish and wildlife resources will be completely mitigated so that there is no net loss or net degradation of the resource.” This is referred to as the “No Net Loss Standard.” It is undisputed that the 2008 FWMP met that standard.³

Because the No Net Loss Standard is the most relevant to this Application we address it first.

A. DCC 18.113.070 Approval Criteria

In order to approve a destination resort, the Planning Director or Hearings Body shall find from substantial evidence in the record that:

...

D. Any negative impact on fish and wildlife resources will be completely mitigated so that there is no net loss or net degradation of the resource.

For all of the reasons described below and in Exhibit A, the Board finds that the Application meets the No Net Loss Standard.

Thornburgh provided a substantial amount of technical analysis and reports that we find persuasive. Of note, included in the technical analysis was a comprehensive summary of the impacts on fish habitat by Lucius Caldwell, PhD, FP-C, who concluded: “*In conclusion, the findings presented above indicate that the combination of planned groundwater pumping at Thornburgh Resort, and the associated mitigation planned to offset this pumping as described in the 2022 Fish and Wildlife Mitigation Plan (NCI 2008; Newton 2022), appear to be a net benefit for both fish habitat quantity and quality at all sites evaluated and would result in no net loss of fish habitat quantity or quality.*” The Board finds that statement is, while not determinative in the outcome of this case, relevant and persuasive. This statement was made during the open record period and no party has provided expert testimony to rebut it, including ODFW.

1. Interpreting the Scope of the No Net Loss Provision

The Court of Appeals has previously interpreted the scope of the No Net Loss Standard. *See Gould v. Deschutes County*, 233 Or App 623, 633 (2010). That decision found that the standard “may be satisfied by a plan that will completely mitigate any impact on the habitat that supports fish and wildlife, without showing that each individual species will be maintained or replaced on a one-to-one basis.” The same is logically true for each individual stretch of river, stream, or waterway; so long as there is evidence in the record to support a finding that the impacts are mitigated such that overall, there is no *net* loss or degradation.

³ The 2008 FWMP only dealt with mitigation related to water habitat and was not intended to address terrestrial habitat. Terrestrial habitat is addressed through a separate plan that is not disturbed by the current Application.

As it relates to that standard, the 2008 FWMP was found to meet it despite showing temperature increases in certain stretches of the Deschutes River of up to an increase of 0.1 degree C, with an average increase in temperature of 0.07-degree C⁴. Here, the evidence provided by Thornburgh through vast quantities of technical data, modeling, and reports, shows that Thornburgh's 2022 FWMP increases flows and decreases temperature, an average of (0.01 degree C), which improves fisheries habitat quality and quantity.⁵ Extensive technical analysis was completed on the Deschutes River, the Crooked River and Whychus Creek, that included: i) complete modeling of surface water flows resulting from changes to groundwater discharge in the 2022 FWMP using the USGS GSFlow model, ii) detailed analysis of the thermal impacts resulting from the changes in flow using the QUAL2Kw model, iii) analysis of changes in flow and temperature, employing both GSFlow and QUAL2Kw in 7 specific spring locations requested by ODFW, iv) further detailed thermal modeling of specific locations around springs in Whychus Creek, v) an analysis of the effects on fish habitat in each of 3 water ways, followed by a Comprehensive Summary of the 2022 FWMP as it pertains to fish habitat. In addition to his conclusions on the entire plan quoted above, Dr. Caldwell assessed the individual streams reaching the following conclusions on each of the following streams:

Deschutes River: *“Overall, the combined effects of planned groundwater pumping and mitigation appear to be a net benefit for both habitat quantity and quality within the Deschutes River, throughout the vast majority of the irrigation season.”*

Crooked River: *“Overall, the combined effects of planned groundwater pumping and mitigation appear to vary seasonally within the Crooked River. During the spring and fall, a net impact is expected for fish habitat quantity and a net benefit for fish habitat quality. During the summer, a net benefit is expected for fish habitat quantity and a net impact for fish habitat quality.”*

Whychus Creek: *“Overall, the combined effects of planned groundwater pumping and mitigation appear to be a net benefit for both fish habitat quantity and quality within Whychus Creek, throughout the vast majority of the irrigation season.”*

Little Deschutes River: *Overall, the effects of planned groundwater pumping and mitigation appear to be one of a habitat quantity benefit throughout the irrigation season, and variable, very small impacts or benefits to habitat quality that vary throughout the irrigation season.*

Dr. Caldwell's report was submitted during the open record period. There was no response in the rebuttal period provided by a biologist related to habitat impacts to rebut his report. No party, including ODFW, rebutted his findings.

⁴ Thornburgh's 2022 FWMP results in reduced temperatures versus increased temperatures in the 2008 plan that were found to meet the No Net Loss Standard.

⁵ The modeled negative impacts are so small as to be immeasurable and of no biological significance and are far less than the 0.1 degree increase that was previously determined to meet the standard when it approved the 2008 FWMP.

According to the science and technical reports, there is generally no scientific or biological significance in the impacts⁶ under the 2022 FWMP and that as a whole the plan provides benefits to habitat for fish and aquatic species.. Given this context, we find that the 2022 FWMP plan meets the No Net Loss Standard.

Nothing in the No Net Loss Standard or our previous application of it requires that Thornburgh receive "approval" from ODFW. In fact, as recently as 2018, this Board declined to impose additional mitigation requirements proposed by ODFW related to other destination resorts.

a) Drought and Outside Impacts

Many of the arguments and issues related to Thornburgh's 2022 FWMP are related to drought and regional well decline. Opponents assert that these are relevant issues and should lead to denial. We disagree in large part. The No Net Loss Standard requires a resort to mitigate its own impacts, not the cumulative impacts of drought or other basin-wide water policy and management issues. The no net loss/degradation test is limited to addressing potential negative impacts of resort development. Impacts to habitat caused by other persons or environmental conditions are not attributable to Thornburgh's use of water or the impacts of Thornburgh's use.

Thornburgh has quantified its impacts on water quality and quantity and the locations where these impacts will occur. It has studied waterway conditions in a typical year, and it has also provided expert evidence that shows the benefits of mitigation are enhanced during periods of drought. This approach properly accounts for issues of drought and the low flow conditions opponents argue make the results of Thornburgh's expert analysis of aquatic habitat unreliable.

Opponents, including the Tribe and ODFW, have also raised issues that pending litigation regarding flow requirements and the Habitat Conservation Plan ("HCP") related to the Spotted Frog may lead to additional constraints on live flows. These issues are outside of the scope of the Thornburgh's impacts and Thornburgh is not required to mitigate for them. Thornburgh must mitigate for its impacts, alone. Further, Thornburgh's plan relies primarily upon groundwater water sources, and its technical analysis shows that the 2022 FWMP will result in increased surface flows which are beneficial to fish and wildlife. Thornburgh has also provided expert testimony that its plan will not result in negative impacts to the spotted frog, which we find persuasive.

b) Regional Well Decline

A large amount of testimony was received regarding regional well declines. This issue has no bearing on whether Thornburgh mitigates its own water use to ensure no net loss or degradation of habitat. Moreover, the record includes evidence that overall groundwater recharge in the Deschutes Basin far exceeds groundwater withdrawals.

2. No Net Loss Standard does not Prescribe Methods; Water Policy Issues

⁶ Substantial evidence shows that virtually all flow and temperature changes, while mostly all beneficial are too small to measure with equipment currently available. Even ODFW notes that impacts to the Crooked River, for example, are "noise."

Appellant Gould, ODFW, the Tribe, and others all assert that the only way to meet the No Net Loss Standard is through “legally protected” instream water – and more particularly, that legal protection can only occur by providing an instream transfer. We do not agree. OWRD has established mitigation rules for the Deschutes Basin which include several different methods of providing legally protected flows. *See e.g.*, OAR 690-505-0605; OAR 690-505-0610. Additionally, other actions may also achieve compliance with the no net loss test, as demonstrated by ODFW’s approval of the Eagle Crest mitigation plan that involves the acquisition and nonuse of Swalley Irrigation District water rights and pumping of some of the rights in a different, more environmentally beneficial location. In reality, the arguments made by opponents relate primarily to issues related to water policy and management, an issue outside of our control and under the sole discretion of OWRD.

Here, many of the issues ODFW or others have raised are related to OWRD and have little to nothing to do with Thornburgh. For example, ODFW argues that ORS 537.270 does not assure water is actually available. However, that statute specifically provides to the contrary. In particular, ODFW takes issue with the “reliability” of certain water rights included in the 2022 FWMP. ODFW asserts that unless Thornburgh can show that the water right has been used to its full extent for 8 of the past 10 years, then any benefit it provides under the 2022 FWMP should not accrue or should be substantially discounted (to 20% of the water right) because the water is already remaining in stream instead of being used. That position is devoid of merit. Testimony to this record makes it clear that no “new” water rights are being created in the Deschutes Basin; all water use must already be certificated or mitigated for by retiring existing rights. This means that if Thornburgh does not use the water rights, it is reasonable to assume they will be sold and used by someone else.⁷ They do not just remain in stream. Moreover, Oregon water law only requires use to the full appropriation once every five years. ODFW’s subjective discounting of water rights is not consistent with the law. There is no factual basis for applying such a draconian discount to any water rights and no actual relationship to the efficacy of the proposed mitigation.

Opponents, notably ODFW, claim on one hand that groundwater discharge is important to them to protect fisheries habitat, but when presented with the 2022 FWMP that is focused on the direct restoration of groundwater to replace reduced groundwater discharge question the “transfer strategy” and how it provides benefits. Several comments claimed it was complex, or too difficult to understand but this is due to the fact the issues are ones that must be addressed by qualified experts. Thornburgh stated that the 2022 FWMP is based on simple, well-established principles that provide in-kind mitigation, largely increasing cool groundwater discharge to replace the loss of the same, and, replacing the groundwater discharges in-proximity to where the impacts would occur, and doing so in advance of when any pumping occurs. We concur with the Applicant and find the technical analysis to be persuasive.

Thornburgh provided expert testimony from its CWRE, as well as expert technical analysis in the form of temperature and flow information that transferring the proposed water (following the 2022 FWMP) would result in additional flows and cooling temperatures, generally. There was scant technical rebuttal to Thornburgh’s expert testimony. For example, as it relates to changes in

⁷ Multiple parties testified that the Tree Farm water right was acquired by Thornburgh underwent competitive bidding processes with multiple buyers vying for the water right and so could be used by others.

flow the only technical materials submitted in opposition were by Ms. Gould's consultant, Mr. Lambie. Mr. Lambie submitted technical reports including flow information on the Crooked River, also derived from the USGS GSFlow model; the same model relied upon by Thornburgh's expert. Mr. Lambie's technical information confirmed what Thornburgh's experts stated, that there was a reduction in flow, although slight on the Crooked River. Mr. Lambie provided no opposing data pertaining to the changes in flow in any other reach, which are largely areas Thornburgh's expert analysis showed increased flow. There was no technical analysis of the thermal impacts or expert testimony provided on such by any opponents. And, as noted above, there was no rebuttal or expert testimony disputing Dr. Caldwell's summary of the effects on fish habitat. We find this information to be persuasive.

We note that opposition arguments criticize water law and OWRD on one hand and rely on it in others.⁸ For example, in ODFW's March 1st letter, it takes issue with OWRD's water management and existing water law. At the same time, it claims that a single method of mitigation allowed by the Deschutes Basin Groundwater Program—instream water transfers—is the only acceptable form of mitigation and that it must be discounted by 20% in certain circumstances. This sort of consultation and comment is unhelpful as it implies a bias to only specific measures and rejection of all others without addressing the overall technical or scientific impacts of other measures that also provide habitat benefits. In fact, Thornburgh pointed out that many of the factual assertions that underlay ODFW's March 1st letter were incorrect and it did so two days before the rebuttal period closed by sending its comments to ODFW directly. ODFW chose not to respond or to correct the factual errors in its testimony that led to its recommendation. This fact supports the Board's conclusion that ODFW's testimony is less reliable and less credible than Thornburgh's.

Nothing in our No Net Loss Standard prescribes any method to meet it. Theoretically, a project applicant could meet it without taking any single mitigation measure, so long as that was supported by substantial evidence. For example, a developer could propose a resort that significantly improves terrestrial or avian habitats that far outweigh any aquatic impacts such that no fish mitigation is required. As relevant and applicable to the Application at hand, however, is that Thornburgh has prescribed measures in its 2022 FWMP which result in meeting the No Net Loss Standard for aquatic habitat alone, as testified to by multiple technical experts of various disciplines.

The 2022 FWMP describes that Thornburgh, who already owns approximately 1,211 acre-feet of water rights, intends to use those rights in a variety of ways to grant it the right to pump water at the Resort, each of which their experts claim will provide similar benefits. The different methods of use include:

- a) Transferring the water rights from their existing points of appropriation to wells at the Thornburgh Resort,
- b) Transferring the surface water rights to instream water rights, and
- c) Cancelling the water right in-lieu of mitigation.

⁸ Although we only specifically address ODFW's comments here, many other commenters argued that the only method of mitigation that is efficacious is instream water rights that are transferred to a governmental entity. That is not the law.

Of the three, opponents claim that (b) is the only acceptable method. Thornburgh provided substantial evidence that all three methods were appropriate and acceptable. Mr. Anuta, Gould's attorney and others claim that there is no "Cancellation in-lieu of Mitigation" program or strenuously and repeatedly claimed cancelling would not protect the water instream, and that anyone else (more junior user) could simply grab the water so there is no benefit. Thornburgh's experts disputed those claims. Mr. Lambie, Gould's expert provided testimony that the formal name for what applicant refers to as cancellation in-lieu of mitigation is the "Offset Voluntary Mitigation Option" which is an acceptable form of mitigation and, as the evidence shows, *does* result in protected instream water under the OWRD mitigation rules. OAR 690-505-0610. We find Thornburgh's experts to be knowledgeable and reliable.

3. Water Law vs. the No Net Loss Standard

ODFW and the Tribes have expressed concern over what they see as shortcomings between OWRD water law and the no net loss standard, i.e.: that water law will not ensure compliance with the No Net Loss Standard. At the same time the opponents raise concerns about the shortcomings of water law, they embrace the use of legally protected instream water rights as the only way to comply with the same standard. and the applicant has shown that Oregon water law and additional assurances in its 2022 FWMP will be reasonably likely to achieve compliance with the no net loss standard.

4. ODFW Reliability of Water Rights

As noted above, ODFW disagrees with elements of OWRD water law and desires to create a new standard related to the reliability of water rights that is outside of typical water law, particularly for these Thornburgh proceedings⁹ and to impose that standard on Thornburgh. This could put Deschutes County into the position of determining aspects of water law that have been delegated to OWRD and not to counties. We decline to take that approach. Thornburgh has provided substantial evidence of pumping records, aerial photos, affidavits of use for individual water rights that indicate substantial use and that rights will provide actual benefits to impacted waterways. Additionally, as Thornburgh has pointed out, ORS 537.270 directly relates to whether certificated water rights are evidence of water priority *and* appropriation or use. We find that where Thornburgh has (or is planning to use) certificated or permitted water that the amount of appropriation, duty and priority govern here.

5. Compliance with the 2022 FWMP

The hearings officer faulted Thornburgh for not providing clearer compliance requirements. ODFW also expressed similar concerns. The hearings officer cited compliance language in Thornburgh's burden of proof in questioning whether that should or should not be included. That language provided the basis for the addition of compliance language in the amended FWMP. The evidence shows that Thornburgh worked with ODFW to further develop language acceptable to ODFW which was incorporated as Section D in the amended FWMP. ODFW

⁹ There is no evidence that shows ODFW has requested any similar rules for any other resort projects in Deschutes County, nor evidence that shows any other project has been held to similar rules.

provided a letter at the hearing stating the language was acceptable. Thornburgh also provided language for a proposed condition 40, that we are accepting to enforce compliance.

In addition, there was concerns the 2022 FWMP would create conflict with existing FMP Condition 38. Thornburgh has requested amending the language to that condition and we also accept that change. Both conditions are below and are imposed:

Revised FMP Condition 38: “Thornburgh shall abide by the April 2008 Wildlife Mitigation Plan (excluding the April 21, 2008 FWMP addendum to that plan and its addenda), and all agreements with the BLM and ODFW for management of offsite mitigation efforts. Consistent with the plan, Thornburgh shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year.

FMP Condition 40: Thornburgh shall comply with the 2022 Fish and Wildlife Mitigation Plan, including its compliance and reporting mechanisms found in Section II of that plan. If Thornburgh proposes to further change the source of water or mitigation it may do so during a land use proceeding as part of a third stage development application under DCC 18.113.040.C so long as evidence in the record shows that the change will not result in a violation of the no net loss standard.

6. Advance Mitigation

Thornburgh has secured, by purchase, all of the water rights described in the 2022 FWMP. The rights will not be pumped regardless of the outcome of transfers or other actions. If a transfer is not approved, the mitigation water created by the cessation of pumping the water right will still provide actual benefits to streamflow, and aquatic habitat. That is what is needed to meet the no net loss test. In addition, the evidence shows that Thornburgh has ceased pumping all the water, with the majority of it already providing mitigation as defined in the FWMP. Thornburgh has been providing mitigation under the individual right, in some cases, for more than a decade. While the Board is not relying upon the advanced mitigation to meet the No Net Loss Standard once its benefits no longer exist, it is meaningful until that time.. Ultimately, our decision finds compliance with the No Net Loss Standard based upon all measures described by the 2022 FWMP.

7. Whychus Creek

Whychus Creek was the subject of intense litigation that was resolve with the approval of the FMP. The FMP required mitigation restoring into Whychus Creek of 1.51 cfs (a minimum of 106 acre-feet) of conserved water from the Three Sister Irrigation District. The Whychus Creek mitigation is final and past all appeals. As there is no change to this segment of the FWMP any attack against the plan in an impermissible collateral attack on the FMP. Further the evidence shows that Thornburgh has completed the requirements pertaining to the Whychus Creek Mitigation and that the water has been permanently transferred instream. In addition, Thornburgh is canceling the Dutch Pacific water right that will provide additional groundwater discharge to Whychus Creek.

8. Reduction of Water Consumption.

Thornburgh has taken the substantial step to reduce its water consumption by roughly 35%. This in turn reduces all impacts on stream flows and leaves more water in the regional aquifer. As Thornburgh stated, it reduced water use in direct response to opponents’ calls to do so. This is a positive action.

9. Other Beneficial Actions

A. Benefits calculated to meet compliance with no net loss						
#	Groundwater	AF	Type	Ownership	Mit Action	Date
1	BFR Deep Canyon - Terrebonne	614.8	Irrigation	TRC	Thornburgh stopped pumping leaving water in aquifer to be discharged via seeps and springs into the river as noted in the GSFlow & QUAL2Kw modeling.	2022
2	BFR Groundwater - Terrebonne	18.9	Irrigation	TRC		2021
3	Dutch Pacific - Sisters	49.5	Irrigation	TRC		2019
4	Tree Farm - Bend	327.5	Quasi-Muni	TRC		2021
Surface Water						
5	LeBeau - LaPine	200	Irrigation	TRC	In 2021 Thornburgh placed water temp. instream. In 2022 provided water to NUID. Will do temp transfer instream in 2023. Water will increase flow from POD to LBC. Permanent transfer pending.	2021
6	TSID Sisters- 1.51 cfs	106	Conserved Water	Permanent Instream Transfer of 1.51 cfs accomplished by canal piping. Funding for project provided by Thornburgh. Project is complete satisfying Condition 39.		2012
Total		1316.7	NOTE: Provides a net benefit to fish habitat, quality and quantity.			
B. Benefits not included in compliance with no net loss (extra)						
#	Other Mitigation	Action		Date	Benefit	
7	Provide mitigation in advance of creating impacts	Provide mit water before pumping or before impacts are realized in stream flow.		2012 on	Leaving water 24,654 AF (1-6 above) in the aquifer or stream prior to impacts benefits fish habitat, equals 17 yrs of pumping	
8	Juniper Thinning on Thornburgh and BLM Land Redmond	Thin Juniper trees on 1,000 of acres of BLM and Thornburgh Lands.		2024-2039	Up to 912 AF of water savings will improve soil moisture, planting and groundwater recharge	
9	Clear Juniper in cooperation with Crooked River Watershed Council	Clear and remove 1,050 acres of Juniper in Crooked River Watershed		2029-2038	210 AF of water savings will improve soil moisture, planting, groundwater recharge	
10	Fund CRWC Nitrogen study	Fund \$5,000 for nitrogen study in cooperation with the CRWC		2024	Determine cause of Nitrogen levels in river to create options to reduce nitrogen in order to improve fish habitat.	
11	Crooked River restoration & riparian improvements w/CRWC	Will provide over \$400,000 for riparian & restoration action in the lower Crooked River		2024-2033	Will improve fish habitat throughout 11 miles of the lower Crooked River.	
12	DRC mitigation Credits	Provided 6 AF of DRC mitigation credits		2103 on	Provides 6 AF of stream flow	

10. Other Issues and Comments.

There were numerous other comments and issues raised. Applicant has created a chart included as Exhibit A that is incorporated into this decision.

Ultimately, we find that Thornburgh's 2022 FWMP meets the No Net Loss Standard. We find that the measures identified in the 2022 FWMP are reasonably likely to succeed. *Gould v. Deschutes County*, 233 Or App 623, 227 P3d 758 (2010).¹⁰

K. Adequate water will be available for all proposed uses at the destination resort, based upon the water study and a proposed water conservation plan. Water use will not reduce the availability of water in the water impact areas identified in the water study considering existing uses and potential development previously approved in the affected area. Water sources shall not include any perched water table. Water shall only be taken from the regional aquifer. Where a perched water table is pierced to access the regional aquifer, the well must be sealed off from the perched water table.

Opponents argue that Thornburgh has no water right, that G-17036 has expired or is no longer valid, or that water is otherwise unavailable such that the current Application must be denied. The Board finds that this issue was settled by approval of the FMP. The Board also finds that compliance with DCC 18.113.070(K) was settled by the CMP and is addressed by FMP Condition 10 which is not implicated in a review of the FWMP. Furthermore, CMP Condition 37 (now met) required that the applicant "demonstrate compliance with DCC 18.113.070(D) by submitting a wildlife mitigation plan to the County as part of its application for Final master plan review." This makes it clear that the No Net Loss Standard and not DCC 18.113.070(K) apply to our review of the Resort's wildlife plans.

This criterion is interpreted to relate only to consumptive water to be used and the Deschutes Basin Groundwater mitigation required by OWRD. The plain text of the criterion makes this clear. It uses language such as "all proposed uses at the destination resort" and "existing uses and potential development previously approved in the affected area" and describes where water can be appropriated from. Nothing in this criterion relates to the fish or wildlife habitat mitigation measures required to meet the No Net Loss Standard.

This interpretation is consistent with that which has been routinely adopted by LUBA and the Courts. For example, see *Gould v. Deschutes County*, 322 Or App 11 (2022) (*Gould OLU*). In a well-reasoned opinion, the Court of Appeals, again, firmly rejected the argument presented by opponents that Thornburgh had no water available to it for consumptive use by the Resort. The Court said:

"We address each of petitioner's challenges in turn, conclude that LUBA did not err, and therefore affirm.

Petitioner's arguments in her first assignment of error turn on LUBA's interpretations of both FMP Conditions 10 and 38, which we review as a matter of law. As noted, several of those interpretative issues have been decided in previous LUBA orders that have been affirmed on judicial review and that we therefore do not consider here. *Beck v. Tillamook*, 313 Ore. 148, 153, 831 P2d 678 (1992) (A

¹⁰ This is especially true because the ultimate backstop for the plan is to not pump water and thereby have no impact. No mitigation is required if no water use or pumping occurs.

party is not entitled to relitigate issues that have been resolved on review of previous phases of the same land use litigation). LUBA has previously held, in orders that we have affirmed without opinion, that the requirements of FMP Condition 10 were satisfied by the documentation provided by Thornburgh, including documentation of the continued existence of Permit G-17036 and mitigation data. *Gould VIII; Gould Golf*. Thus, we decline to consider petitioner's contention in her first assignment that Thornburgh has failed to show that it holds a valid water permit or that it has not presented sufficient data on mitigation. And we decline to consider petitioner's argument, resolved in previous litigation, that FMP Condition 10 requires proof, at this stage, of the availability of actual water behind Thornburgh's water right. Thus, all of petitioner's arguments relating to FMP Condition 10 have previously been rejected and we reject them here.

Most of petitioner's arguments in her first assignment of error relating to FMP Condition 38 have also been previously addressed and rejected by LUBA in earlier orders. Petitioner's primary argument is that the requirement in FMP Condition 38 that Thornburgh "abide by" "the April 2008 Wildlife Mitigation Plan, the August 2008 Supplement, and agreements with the BLM and ODFW for management of off-site mitigation efforts" means that petitioner must prove, at every approval stage, that it has fulfilled those requirements, which are set forth in the FWMP. LUBA noted in its order that "the plain meaning of 'abide by' is 'to act or behave in accordance with or obedience to (as a rule or promise) * * *: conform to.' *Webster's Third New Int'l Dictionary* (unabridged ed 2002). The opposite of 'conform to' is 'deviate from.'" (Omission LUBA's.) LUBA agreed with petitioner's contention that the requirement that Thornburgh abide by the requirements of the FWMP at every stage means that it must comply with the FWMP at every stage. But LUBA noted that it has held, in an order that we have affirmed without opinion on judicial review, *Gould VIII*, that neither the FWMP nor FMP Condition 38 requires pre-development mitigation, and that the requirement to "abide by" the FWMP in FMP Condition 38 is satisfied by the reports filed by Thornburgh that address the requirements of the FWMP. As interpreted by the county and affirmed by LUBA, compliance with FMP Condition 38 is measured by annual reporting filed after water use has begun. We are satisfied that, in light of the requirements of the FWMP, with which FMP Condition 38 requires compliance and which imposes no requirement for pre-development mitigation, LUBA's interpretation of FMP Condition 38 is correct as a matter of law. We therefore reject that portion of petitioner's first assignment of error." *Gould v. Deschutes County*, 322 Or. App. 11, 23-24, 518 P.3d 978 (2022)(*Gould OLU*).

Further, as in other County decisions approving Thornburgh development approvals, Thornburgh again provided evidence that G-17036 is a valid and non-cancelled permit. The Board finds that this criterion, if relevant, is met.

Opponents misconstrue the County's previous approval of the CMP and FMP; nothing in either approval requires Thornburgh to utilize a specific permit or application for consumptive water use. The CMP contains no findings of fact that rely upon any specific water permit.

Instead, the CMP contains general findings that the source of water for Resort uses would be ground water drawn from wells on the Thornburgh property. The "source" of the groundwater is not, as claimed by opponents, a specific OWRD water right permit which authorizes pumping from the source, the regional aquifer. This is easily demonstrated by a review of the CMP Document, CU-05-20 that is included in this record. These findings include for instance:

Under DCC 18.113.070(K) ("adequate water will be available...")

- p. 79: "The source of water for the project is ground water from the regional aquifer of the Deschutes Basin."¹¹
- p. 83: Under "Source of water": "In comments submitted in response to the BOP and rebuttal materials, Gould contends that Applicant failed to explain in sufficient detail where it is to obtain water for this development. The Board finds Applicant has shown that water for the project will be provided by ground water, to be pumped from wells that will be constructed on the project property."

Deschutes County has *never* made findings that Thornburgh is bound to a single application to serve for consumptive water; it has consistently determined that water for Resort use purposes is ground water – a finding that remains *unchanged*. To the extent opponents argue that Condition 10 required a specific water right we reject that contention. Nothing in the CMP or FMP decision so noted or required. And, even if opponents were to be correct, nothing prevents the County from processing or approving an amendment that would change it.

The same is true with regards to other destination resorts in Deschutes County. For example, the approval of Pronghorn Resort (now Juniper Reserve) identified multiple potential sources of water. It changed its water supply without being required to modify its CMP or FMP. Similarly, Eagle Crest (as recently as last year) was permitted to add additional wells and well capacity not specifically authorized by its CMP or FMP without modifying its CMP or FMP. Deschutes County declines to require Thornburgh to meet a higher standard related to water availability.

The Board finds that so long as the Resort can show, consistent with FMP Condition 10, that a groundwater right remains in a valid and non-cancelled status that may serve the Resort that this criterion is not violated and FMP Condition 10 is satisfied.

Having addressed the substantive arguments found in DCC Title 18 we now address the procedural arguments.

B. Procedural Arguments

Throughout the proceedings below and before the Board, several parties including Appellant Gould made several procedural claims or arguments that must be addressed.

1. "Void CMP" Argument

¹¹ On the same page, the BOCC also interpreted DCC 18.113.070(K). That interpretation stands.

Opponents claim that LUBA held in *Central Land and Cattle Co. v. Deschutes County*, 74 Or LUBA 326 (2016) land use decision (“LUBA FMP 2016 Decision”) that the Thornburgh conceptual master plan or “CMP” is void. In reality, LUBA held that the FMP “has effectively incorporated and displaced the CMP approval.” *LUBA FMP 2016 Decision* at 346. LUBA did not find that the CMP is void. Furthermore, as is detailed in that case, the County’s hearings officer *rejected* Appellant Gould’s argument in that case that the CMP was void and LUBA affirmed that decision. Therefore, this argument is an impermissible collateral attack on the resolution of this issue by the *LUBA FMP 2016 Decision*. It is also settled and binding under *Gould v. Deschutes County*, ___ Or LUBA ___ (LUBA No. 2022-013, June 1, 2022), *aff’d* 322 Or App 11, 23 (2022) (explaining a party may not relitigate issues resolved in previous phases of development), *rev den*, ___ Or ___ (S069882).

Opponents go on to claim that the CMP is void because Thornburgh failed to seek and the County failed to hold a hearing on remand in *Gould v. Deschutes County*, 72 Or LUBA 258 (2015) within the statutory timeline under ORS 215.435. This issue is an impermissible collateral attack on LUBA’s finding that the CMP has been incorporated into the FMP. Furthermore, the provision of ORS 215.435 that terminates an application if a review on remand is not requested within 180 days of the final resolution of judicial review was not effective until after LUBA issued its remand decision. This law may not be applied retroactively because to do so would prejudice the Applicant in that case by voiding that application. Furthermore, the case in question did not find that the CMP is void and that was not its legal effect. LUBA approved the FMP thereafter finding that it incorporated the CMP and that decision is final.

The Board finds that Thornburgh’s CMP is not void.

Moreover, the Board notes that the CMP required creation of a FWMP to meet the No Net Loss Standard at FMP approval stage, not during CMP review. Therefore, the CMP is not implicated or altered by this Application; there is no change to the CMP and findings from the CMP are altered.

2. Interaction between the CMP and FMP

There is some confusion regarding the County’s resort application process and the relation, if any, between a CMP and FMP. Opponents to the Application argue that the CMP and FMP are not one document and the Hearings Officer found that the CMP and the FMP are two separate documents. The Applicant has stated they are one document. We find that the issue is largely irrelevant because the FMP “incorporated and displaced” the CMP, as stated by LUBA. We agree with the Applicant that they are both a part of a single document – one part being the CMP and the other being the FMP.

As outlined in DCC Chapter 18.113, a destination resort is subject to a three-stage approval process. After a CMP is approved, a more refined FMP must be approved. Finally, each phase receives final approval, which is much more specific, at the individual site plan or tentative plan stage. Up and until a third-stage application, fluidity in a resort’s plan is warranted and provided for in the Code and in the Board’s 2006 decision approving the CMP..

For example, DCC 18.113.090 requires general locations and descriptions to be included in the FMP. DCC 18.113.100.A then requires the FMP to be adjudged against the CMP criteria and standards. Once a FMP is approved, third-stage development applications may be made and compliance is adjudged against the FMP. DCC 18.113.040.C.

The purpose and relevancy of the CMP now, is for context related to a modification of the FMP approval. The hearings officer erred in finding that modifying the FMP may, in this case, require modification of the first-phase CMP document. Here, no change to the CMP is required. The final version of Thornburgh's CMP included Condition 37. It replaced CMP Condition 28, which was rejected by the Oregon Court of Appeals. CMP Condition 37 required the applicant to demonstrate compliance with DCC 18.113.070(D)(no net loss/degradation) by filing a wildlife mitigation plan as a part of its application seeking approval of the FMP. It also required that a public hearing be held with the same participatory rights allowed for approval of the CMP. While CMP Condition 37 applied to the review of the Resort's initial FWMP during the review of the FMP, it also applies to any changes made to the FMP that involve revisions to the FWMP. The Applicant has complied with CMP Condition 37 by seeking the required public review for an amendment of the FWMP part of the FMP. Furthermore, no finding in the CMP considers, relies on or addresses any of the provision of the 2008 FWMP so no change of the CMP is required in order to approve changes to the FWMP.

This interpretation of our Code and the Thornburgh CMP and FMP decisions is consistent with previous decisions by LUBA and the courts. LUBA previously found that “[a]ll requirements of the CMP approval are now requirements of the county's FMP approval. The FMP approval has effectively *incorporated and displaced* the CMP approval.” *Central Land and Cattle Co., v. Deschutes County*, 74 Or LUBA 326, 346 (2016). Emphasis added. This makes sense given that third-stage development applications are no longer required to find compliance with the CMP and are instead reviewed for compliance with the FMP which incorporates CMP requirements. DCC 18.113.040.

3. Substantial Change – Code and Conditions

Opponents argue that the Application seeks a substantial change to the approved CMP and FMP and that such a change requires a new application or a consideration of substantive criteria other than DCC 18.113.070(K), including all criteria related to the original CMP approval. These arguments are largely based upon the term “substantial change” as it is used in various provisions of the Code or specific conditions. While the hearings officer attempted to harmonize these requirements, the decision below was at times conflicting. We take this opportunity to clarify and interpret our code as it relates to “substantial changes” in the context of this Application.

a) DCC 18.113.080

Opponents have argued that the Application is a “substantial change” as that term is used in DCC 18.113.080 and so the Application must be reviewed against all criterion related to CMP approval. They argue that the Application's proposed reduction in water use and or deletion of an

optional golf course changes/alters the “*type, scale, location, phasing or other characteristic of the proposed development.*” The Board disagrees.

DCC 18.113.080 states:

“Any substantial change, as determined by the Planning Director, proposed to an approved CMP shall be reviewed in the same manner as the original CMP. An insubstantial change may be approved by the Planning Director. Substantial change to an approved CMP, as used in DCC 18.113.080, means an alteration in the type, scale, location, phasing or other characteristic of the proposed development such that findings of fact on which the original approval was based would be materially affected.”

As noted below by the Applicant and by the Tribe in comments filed with the Board, the CMP and FMP do not commit the Applicant to using all of the water authorized by approval of the FMP or to develop more than one golf course. Consequently, a commitment not to use all allowed water, or to not build a golf course that was *optional* and not required, does not alter the scale of the Resort in any way such that findings of fact of the original CMP approval would be materially affected. Only one golf course is required and the other two are optional. This means that the third golf course that the Applicant has agreed not to build is not required to be built, even if the impacts of this potential golf course were identified, studied and mitigated. Choosing not to construct it is not a substantial change given that it was not required in the first instance. As a result, the Board finds that limitations on water use and golf course development are not a substantial change to the approved CMP.

The hearings officer correctly determined that the DCC 18.113.080 definition of “substantial change” has a second requirement (in addition to the “alteration” requirement addressed above). That is, the hearings officer is correct that Applicant’s proposal to modify the CMP/FMP water usage or elimination of an optional golf course are not “substantial changes” under DCC 18.113.080 because the changes would not require an alteration of the findings of the original approval.

However, we disagree with the hearings officer interpretation of the Code in that the hearings officer determined that changing mitigation from the 2008 FWMP to the 2022 FWMP is changing a characteristic of the proposed development. We agree with the Applicant that the changes in the source of mitigation water from the 2008 FWMP to the 2022 FWMP is merely a change to a plan that *mitigates for the impacts* of the proposed development. It does not change the proposed development or the characteristics of it beyond placing a greater restriction on the maximum amount of water used and the number of optional golf courses that may be developed. Approval of the proposed amendment does not require any change in the findings of the CMP as none address the provisions of the 2008 FWMP.

Further, the hearings officer’s determination that an amendment to the FWMP would materially affect the findings of compliance with the No Net Loss Standard in the FMP because it modifies mitigation measures and so is a DCC 18.113.080 “substantial change,” is incorrect. DCC 18.113.080 asks whether a proposed change to an “approved CMP” is a substantial change. The

approved CMP is the CMP approved by the Board in DC Document No. 2006-151 as modified by DC Document No. 2008-51. No finding of the approved CMP addresses the particulars of the 2008 FWMP. Instead, Condition 37 of the approved CMP requires the filing and public review of an FWMP with the FMP application. The requested modification of the FWMP has been reviewed in the manner required by Condition 37 of the approved CMP, which is through a land use application review.

Opponents have also argued that DCC 18.113.080's requirement that any substantial change "be reviewed in the same manner as the original CMP" requires an entirely new CMP. That is not the case. The Code merely requires that a substantial change be reviewed "in the same manner" as the original CMP, which is to say that it proceed through land use review in the same way as the original CMP in that case. Even though the Board finds that no substantial change is proposed here, the land use review has afforded the same process provided during the original CMP, which was review before a hearings officer and then the Board of Commissioners.

The Board finds that the Application does not need to meet all criteria related to CMP approval and, as already discussed herein, the CMP is not implicated by the Application. The Board further finds that the Application does not represent a substantial change as that term is used in DCC 18.113.080.

b) CMP and FMP Condition 1 – New Application & Substantial Change

Opponents argue that CMP and FMP Condition 1 are relevant and that they require a new resort application. These conditions are identical and are addressed herein as "FMP Condition 1." FMP Condition 1 provides that "approval is based upon the submitted plan. Any substantial change to the approved plan will require a new application." The Board disagrees with opponents that a "new application" means a new CMP or new FMP. The reference to a "new application" means a new land use application and land use review, which has occurred here. It does not mean a new CMP or FMP application. This is the most reasonable interpretation of this language as the condition uses a term, "substantial change," defined by and assigned consequences by the Resort code. There is nothing in the text of Condition 1 to suggest that a different and more stringent rule is being applied by the CMP and FMP decisions. Applying an interpretation that is different than the Code would effectively repeal the relevant Code criteria regarding substantial change.

The CMP originally imposed Condition 1, which states that "Approval is based upon the submitted plan. Any substantial change to the approved plan will require a new application." Upon FMP approval, the hearings officer carried through the condition to ensure compliance with the original CMP. The condition means the same in both contexts, and neither require that an application for a new CMP or new FMP be sought, only that a modification application be filed and then reviewed in the same manner as the original approval.

This interpretation is consistent with the Board's previous findings in Thornburgh's CMP decision in 2006. In our 2006 Decision, the Board determined that the substantial change of converting Phase A Overnight Lodging Units to single-family homes would require "a modification of this conceptual master plan" – not approval of a new CMP. DC Document

2006-151, p. 46. This finding is contained in the same decision that created Condition 1. If a new CMP were required to make a substantial change such as this to the CMP, Condition 1 would surely have said so. Additionally, Condition 1 does not say that a substantial change renders the approved CMP or FMP void. It only requires a “new application” which the BOCC’s CMP findings indicate is an application for modification of the conceptual plan.

With regards to whether the Application is a Condition 1 “substantial change,” the hearings officer determined that LUBA had held in a previous modification that the application of DCC 18.113.080’s “substantial change” definition to define the meaning of FMP Condition 1 was appropriate and so the Application is an FMP Condition 1 “substantial change” because he determined a DCC 18.113.080 “substantial change” was requested. As already noted above, the Board disagrees that the Application is a DCC 18.113.080 “substantial change” because it involves no change to the approved CMP. The Board agrees with the hearings officer that DCC 18.113.080 defines the meaning of “substantial change” in FMP Condition 1. The Board, however, finds that the Application is not a “substantial change” for the purpose of FMP Condition 1. As we determined earlier, it is not a change of CMP Condition 1.

While FMP Condition 1 relates to the FMP that includes the 2008 FWMP, the 2022 FWMP will not modify or authorize additional development so it will not impose significant additional impacts on surrounding properties. It is not a “substantially new [destination resort] proposal.” The 2008 FWMP is a discrete and minor part of the FMP that addresses one code criterion of many – DCC 18.113.070(D). It serves a narrow purpose of mitigating the impacts of resort development. It is not, itself, resort development or a plan for resort development.

FMP Condition 1 was imposed to apply to the entire FMP and all supporting documents, not to a discrete singular mitigation plan. Instead, FMP Condition 38 was imposed for compliance with the FWMP, which is exactly what the Application seeks to modify. We agree with the hearings officer’s findings of compliance with DCC 22. 22.36.040(C) that find that the FWMP is a minor part of the approved FMP. Changing this one element or part is not a substantially new destination resort proposal.

We find that this is permitted and that such a modification is not a “substantial change” for the purposes of FMP Condition 1.

Opponents argue that approval of the FMP and 2008 FWMP relied upon findings of fact that the Resort had obtained OWRD water right permit G-17036 and that that permit has since expired. We disagree that the FMP and FWMP relied upon that permit, and, that argument has been routinely rejected by appellate bodies. We have further addressed this issue above related to water availability and in Exhibit A.

The record includes OWRD records that show that G-17036 remains “non-cancelled.” LUBA and the Oregon Court of Appeals have affirmed County findings in approvals of Resort development that G-17036 has not expired. *Gould v. Deschutes County*, 322 Or App 11 (2022), rev den [CITE] (“*Gould OLU*”). The Oregon Court of Appeals has also found that “there is no requirement in the FWMP that the water rights and mitigation can only be satisfied through Permit G-17036.” *Gould OLU* at p. 22, fn 7. LUBA has also found that “[i]n calling for ‘updated

documentation for each phase of development, the text of FMP Condition 10 suggests that water sources and permits for the destination resort could potentially change following FMP approval.” *Gould v. Deschutes County*, __ Or LUBA __ (Or LUBA No. 2021-066, p. 13). We agree with the Court of Appeals and LUBA.

4. DCC 18.113.100 and Modifications of FMPs

Our Code specifically permits the modifications of any land use decision, including FMPs and, to the extent necessary, CMPs. DCC 18.113.100 makes it clear that any provision of an FMP, including an amended FMP, that is a substantial change from an approved CMP may be approved as a modification or amendment. And, contrary to the claims of the opponents, nothing in our Code requires that these processes happen in sequential fashion; they can occur in tandem and during the same application process, so long as the change is reviewed in the same manner as the original CMP. DCC 18.113.080. We interpret DCC 18.113.100 to permit modifications to an FMP and that if such a modification is a substantial change that it must (and may) also be approved at the same time as a modification to the underlying CMP.

5. Harmonizing DCC 18.113.080, Condition 1, and Modifications of FMPs

Both DCC 18.113.080 and FMP Condition 1 require a new application in the event of a substantial change of the CMP. FMP Condition 1 requires that the Application does not represent a substantial change and we make such a finding. We also find that, even if the Applicant had proposed a “substantial change” that the “new application” referred to in both criteria only means a new land use application reviewed in the same manner as the original approval – it does not require a brand new proposal, merely an application to amend or modify the proposal. The review of the modified FWMP conducted by the County is the same review required for substantial modifications.

Opponents also argue that modification necessarily implicates the CMP. While that may be the case in certain circumstances, that is not the case here. The CMP imposed CMP Condition 37, which says:

“Applicant shall demonstrate compliance with DCC 18.113.070(D) by submitting a wildlife mitigation plan to the County as part of its application for Final master plan approval. The County shall consider the wildlife mitigation plan at a public hearing with the same participatory rights as those allowed in the CMP approval hearing.”

Therefore, while CMP Condition 37 may be the base against which changes are measured, we find that no substantial change to the CMP itself is required because the CMP does not contain the 2008 FWMP. Given that CMP Condition 37 imposes a requirement to review an FWMP through a public hearing, even if the CMP was implicated, we find that Thornburgh has complied with the requirement of CMP Condition 37 when seeking review of a modification of the FWMP because the Application was been reviewed through a public hearing process and the requirements of CMP Condition 37 have been met. Logically, this condition applies both to a modification of an FMP modification as well as to the initial plan. To read it as ineffective

during the review of an FMP modification and instead give effect to former CMP Condition 27 which was replaced by CMP Condition 37, would remove the assurance of public review of the FWMP needed to assure that the CMP was a valid approval. It would also be a collaterally attack against the final decision.

6. DCC 22.36.040 – General Modification Criteria

Our Code also imposes general modification criteria that apply to all land use applications that apply except to the extent that other more specific requirements, such as those provided in DCC Chapter 18.113, that authorize the approval of substantial modifications, apply.

a) DCC 22.36.040 – “surrounding properties”

Opponents argued that for the purpose of defining “surrounding properties” under DCC 22.36.040, “surrounding properties” is not just adjoining properties but includes substantially more lands including any land connected by river flows, irrigation wells, drinking water, or water as a whole. The Board disagrees and declines to make an application-specific definition or interpretation of the Code. The Board believes a more pragmatic approach, which interprets the Code as it may be applied to any modification request is both more prudent and plausible. To that end, we agree with the hearings officer, that “surrounding properties,” as used in DCC 22.36.040(C), literally means the real property ownerships that are directly adjacent to (surrounding) the Subject Property. Given the fact the Resort adjoins large tracts of land owned by governmental entities and one 80-acre property owned by a private owner, this is a reasonable impact area to use to assess the impact of changes if an application-specific definition of “surrounding area” were applied by the Board.

Even assuming that “surrounding properties” includes the undefined broader area mentioned by opponents, the impacts of the modification of the FWMP in these areas is not “significant.” Imposing a limit on the Resort’s water use may, at best, offer a slight benefit to area properties beyond adjoining properties by having a lesser impact on groundwater wells than authorized by the FMP, but this is not a “significant additional impact.” If the “surrounding properties” includes all streams and rivers benefitted by the mitigation plan and riverfront properties, the temperature and flow impacts of water transfers and mitigation is so low as to be immeasurable so is not a “significant additional impact.” DCC 22.36.040(C). This is well documented by Thornburgh’s expert technical reports, which we find to be credible and persuasive. The same is true for any water declines in the area that would be caused by pumping at Thornburgh.

b) DCC 22.36.040.B – “substantially new proposal”

DCC 22.36.040.B provides:

“Unless otherwise specified in a particular zoning ordinance provision, the grounds for filing a modification shall be that a change of circumstances since the issuance of the approval makes it desirable to make changes to the proposal, as approved. A modification shall not be filed as a substitute for an appeal or to

apply for a substantially new proposal or one that would have significant additional impacts on surrounding properties.”

The Board finds that changes in circumstances exist such that it is desirable to make changes to the 2008 FWMP. Among others, this includes the robust technical analysis provided by Applicant's experts that the 2022 FWMP will result in increased stream flows and decreased stream temperatures.

Opponents argue that the 2022 FWMP is a “substantially new proposal” which cannot be approved. We disagree. DCC 22.36.040.B relates to whether the modification modifies the actual approved use, in this case, the Resort as a whole. It relates primarily to the approved FMP and, because the Application only proposes an updated FWMP without substantially changing the actual required development contemplated by the FMP, we cannot find the proposal to be a “substantially new proposal.” We also agree with the Applicant that many elements of the 2022 FWMP remain the same as from the 2008 FWMP, including the purchase of Big Falls Ranch water rights and the TSID mitigation for Whychus Creek.

The Application proposes no new infrastructure, housing units, or other actual development. The Application also proposes no “significant additional impacts on surrounding properties.” Therefore, we find that the Application is permitted as a modification under DCC 22.36.040.B.

c) DCC 22.36.040.C – “discrete aspect”

DCC 22.36.040 (C) states:

“An application to modify an approval shall be directed to one or more discrete aspects of the approval, the modification of which would not amount to approval of a substantially new proposal or one that would have significant additional impacts on surrounding properties. Any proposed modification, as defined in DCC 22.36.040, shall be reviewed only under the criteria applicable to that particular aspect of the proposal. Proposals that would modify an approval in a scope greater than allowable as a modification shall be treated as an application for a new proposal.”

The modification proposal will not have “significant additional impacts on surrounding properties.” It is not, based on findings for “surrounding properties” and DCC 22.36.040.B., a “substantially new proposal.”

Applicant's proposed modification of the use of water, elimination of one (of three) golf courses and changing the source of FWMP mitigation water are “discrete” aspects of the FMP approval. We find that the Application is not greater in scope than allowable as a modification.

7. Modification of Application During Review Arguments

Both before the hearings officer and again before the Board, Appellant Gould and others argued that Thornburgh had modified its Application by submitting additional evidence in response to

comments made or information requested by ODFW and others such that Thornburgh the 150-day clock should be restarted. These arguments generally related to the DCC 22.20.055 or procedural requirements of ORS 197.797.

We have previously interpreted our modification Code when Appellant Gould raised the same arguments during review and approval of the CMP and we decline to reinterpret them here. These findings are included in the record and are found at page 89 of CU-05-20. In essence, a modification only may be found if the additional information requires the application of new criteria to the proposal, such that the findings of fact would require change. Thornburgh providing response or additional evidence to support its Application does not change the applicable criteria. As such, the Board finds that no modification occurred.

Appellant Gould requested and was granted a *de novo* hearing before the Board on all issues. It is not error for an Applicant to submit additional response evidence during a *de novo* hearing of her appeal.

8. ORS 197.797 has Not Been Violated

Appellant Gould argues that the County has violated ORS 197.797 because it permitted the Applicant to submit additional evidence to support the Application during the public review process. We find this argument to be unpersuasive and contrary to the plain text of the statute.

ORS 197.797(4)(a) requires that "All documents or evidence relied upon by the applicant shall be submitted to the local government and made available to the public." Appellant Gould argued that by the Applicant putting in any supporting evidence including a revised FWMP document, this law is violated. This is not a correct reading of that law. All that law requires is that documents be available, which they clearly are given that Appellant Gould specifically commented or provided rebuttal argument and evidence related to them. ORS 197.797(4) does not prevent an applicant from submitting additional information or evidence, and, actually expressly permits additional evidence. ORS 197.797(4)(b).¹²

Furthermore, ORS 197.797(5)-(7) and (9) govern the receipt of evidence at and after the conclusion of a land use hearing and an initial land use hearing. None of these provisions prohibit an applicant from providing evidence at a land use hearing or during a post-hearing comment period. Additionally, ORS 197.797(6)(c) says that "[a]ny participant" may request an opportunity to respond to new evidence filed during the post-hearing comment period; making it clear that an applicant is not prohibited from providing rebuttal evidence for consideration by the Board.

Similarly, Appellant Gould's arguments that ORS 197.797(3) has been violated is without merit. That section only requires that the County to mail notice within 20-days of the hearing. The fact that Thornburgh has provided additional evidence to respond to Appellant Gould and others does not mean that the County has violated procedural requirements of the statute. To the extent Appellant Gould has argued that the inclusion of additional evidence or updates to the 2022

¹² ORS 197.797(4) also likely does not apply to post-hearing record periods. Those periods are controlled by ORS 197.797(6).

FWMP makes it unrealistic for the public to understand the application under consideration, we find little merit in that argument. Thornburgh has clearly applied to modify the FMP by replacing the 2008 FWMP with the 2022 FWMP to meet the No Net Loss Standard and the mitigation measures proposed by that plan to meet the standard are those proposed by the initial Application with only minor adjustments made to address objections to the Application.

Appellant Gould makes additional arguments before the Board that ORS 197.797(6) is violated. Again, we disagree. ORS 197.797(6) only applies to the initial evidentiary hearing and not to an appeal hearing before the Board. Even still, as discussed in response to Appellant Gould's objection during the rebuttal period, we find that Thornburgh providing additional technical evidence in response to evidence or comments made by Appellant Gould, ODFW, or any other participant is not a violation of ORS 197.797(6).

9. Rebuttal Objection

Appellant Gould also argued, after the record was closed, that Thornburgh improperly provided testimony that it "should have or could have" submitted earlier. This argument is based upon her claim that the "structure of ORS 197.797(6) is to provide opponents the last word on evidence[.]" We disagree. Nothing in the statute provides project opponents with the ability to provide "the last word on evidence" and the statute specifically allows "any person" or "any participant" to submit new evidence during a post-hearing comment period. Moreover, by its terms, ORS 197.797(6) only applies to an initial evidentiary hearing and not to a *de novo* appeal hearing before the Board.

The Board has reviewed the objection by Appellant Gould and filed on March 10, 2023, and the response provided by Thornburgh on March 13, 2023, and agree with Thornburgh. All evidence provided by Thornburgh is responsive to evidence, issues, or claims provided by opponents during the open record period. For those reasons, the Board denies Appellant Gould's request.

C. Miscellaneous Argument and Arguments Outside of the Scope of the Proceeding

Opponents have raised a number of issues that have no relevancy to the Application. We have generally addressed those in Exhibit A.

1. Changes to Physical Layout Warrants Additional Modification

Staff and opponents have questioned whether Thornburgh's plan to remove an optional golf course is a substantial "on the ground" change that warrants a broader modification of the Resort's CMP and FMP. We find that it does not. The scope of the Application relates only to the modification of the Resort's FWMP and our decision is generally limited to the scope of the present Application.

The Application supports a reduction of water use by removing an optional golf course. Given that the golf course is *optional*, it is clear that the CMP and FMP approvals contemplated that changes in the number of golf courses might occur. It is worth noting that the Resort has already

received various approvals including a golf course site plan, two tentative plans, and various site plans, that have already updated the physical layout of the Resort. Those decisions cannot be collaterally attacked during this proceeding or any proceeding in the future.

Further, the Board finds that it is entirely appropriate to make reasonable revisions to the FMP layouts during third-stage review under DCC 18.113.040.C. The FMP approval criterion at DCC 18.113.090 are only meant to provide general, preliminary, or descriptions of later applications; they are not set in stone and unable to change. An FMP does not require legal descriptions or accurate surveying and monumenting, it is a general plan. That process is reserved for the requirements of individual site plans and tentative plans. The Board finds that DCC 18.113.040 and the three-stage application process specifically allows “on the ground changes” or updates but does not require that a CMP or FMP be modified for each change unless the specific impacts of the change proposed in a DCC 18.113.040.C application would result in substantially different or substantially increased impacts to surrounding property owners. For context and illustration, this could mean moving a resort concert or event venue from one side of the resort to the other and next to a noise sensitive use that pose impacts not assessed during review of the CMP or FMP.

2. G-17036 is Required under Condition 38 and the 2008 FWMP Argument

Opponents argue that the 2008 FWMP and the findings of fact related to FMP Condition 38 relied upon the specific impacts of G-17036 and the permit's mitigation sources to ensure the mitigation plan met the No Net Loss Standard. This argument has been made and rejected numerous times, including at the Court of Appeals. *Gould v. Deschutes County*, 322 Or App 11, 22 fn 7 (2022) (*Gould OLU*). We agree with the Court's analysis, nothing in the previous 2008 FWMP or in the FMP requires use of G-17036 by the Resort, nor were findings of facts based upon it. The only findings regarding the source of consumptive water included in the FWMP are that water be appropriated from the Deschutes Basin regional aquifer.

Regardless, we find that the No Net Loss Standard only requires a showing that specific measures ensure that the Resort's groundwater pumping will result in no *net loss* or degradation of wildlife habitat. This is detailed more above. Neither that standard nor the FMP nor the 2008 FWMP require use of a specific groundwater permit.

3. Alleged Code Violations and Well Indemnity Agreement

Opponents have argued that the Application cannot be approved due to alleged violations under DCC 22.20.015. We have previously interpreted that code provision (which is in this record) and decline to do so again. Under our previous interpretations, which have been upheld on appeal, we are not required to address alleged code violations during this proceeding unless the Subject Property has been adjudicated to have existing code violations. There are no adjudicated code violations. Further, these arguments are mostly based upon opponents' “void CMP” argument, which we have already addressed and rejected.

Appellant Gould also argues that Thornburgh is in violation because the well indemnification agreements required by CMP Condition 11 were offered by a different and now inactive LLC.

We disagree for three reasons. First, CMP Condition 11 required the “Applicant” of the Resort to provide such agreements. Deschutes County did not condition the CMP or FMP approvals to apply to any particular entity or to prohibit assignment of development rights by Thornburgh Resort Company, LLC to Central Land and Cattle Company, LLC. This issue was settled against Appellant Gould during the FMP litigation. *See Central Land and Cattle Company, LLC v. Deschutes County*, __ Or LUBA __ (LUBA No. 2015-107, September 23, 2006)(Cross Petition Issue C). Thornburgh remains bound to provide the well agreements because Central Land and Cattle Company, LLC has assumed all development rights and obligations of Thornburgh Resort Company, LLC and because the resort approvals and their conditions run with the land and apply to development by any developer. Second, this issue has no bearing on whether the Resort meets the No Net Loss Standard, and so it is not a relevant approval criterion. Lastly, the issue is not ripe because Thornburgh has not begun pumping water for Resort uses. Therefore, compliance with the well indemnity requirements is not yet required and no violation of CMP Condition 11 has occurred.¹³

4. Housing Affordability and ORS 197.455

Opponents argue that approval of the Application will have negative impacts on housing affordability or that the Resort will not be able to pay employees enough, thereby exacerbating affordability issues. These arguments are in no way applicable to the Application and we decline to further address them.

Appellant Gould argues that ORS 197.455 precludes Thornburgh from providing residential housing. This is simply incorrect and has been routinely rejected by LUBA and the Courts. *See Gould v. Deschutes County*, __ Or LUBA __ (LUBA No. 2022-011, June 16, 2022)(slip op 15-17), *aff'd without opinion*, 311 Or App 383 (2022). Further, it has no bearing on the application at hand.

5. Claims of Streams or Wetlands on Subject Property and DSL Coordination

Appellant Gould claims that streams exist on the Subject Property. That is simply not the case, as stated Hickman Williams & Associates. Further, Department of State Land (“DSL”) staff advised planning staff that notice to DSL was not necessary because no wetlands or streams exist on the property.

6. Adequate Sewer Flow

Appellant Gould and her technical expert Mr. Lambie argue that the Thornburgh must also update its Sewer System Master Plan. This argument is based upon Thornburgh's decision to not build an optional golf course. The Board finds that the Sewer Master Plan is not implicated by changes to the 2022 FWMP, nor does it supply applicable criteria for the review of this application. Nothing in the 2008 FWMP implicates the Sewer System Master Plan, either.

¹³ To the extent relevant to Appellant Gould's argument, the Board finds that CMP Condition 11 required a showing of “actual well interference as a result of Applicants [sic] water use.” Actual well interference requires a finding of such by OWRD, who assisted in developing the well indemnification agreements. *See* CMP Condition 11.

Additionally, the Sewer System Master Plan found that only 34.5 acres of land are needed in the south basin to apply treated effluent to. The south basin is the southern half of the Resort that received approval for two golf courses but where only one will be built. Based upon the size of the approved golf course and other open space and landscaped areas already approved by previous decisions, there is more than enough land to apply the effluent contemplated by the Sewer Master Plan. Thornburgh has also provided a technical response to this issue, which is persuasive.

Thornburgh's sewer system is subject to approval to the Oregon Department of Environmental Quality ("DEQ"). That body is the correct body that approves construction drawings and requirements. This argument provides no basis for denial.

7. Adequate Water for Uses and Fire Flow

Opponents argue that there is not sufficient water flow to ensure fire suppression for resort uses. This is not applicable criteria or relevant to whether or not the 2022 FWMP meets the No Net Loss Standard. Thornburgh has provided a technical response from Hickman Williams & Associates that refutes this argument, which is persuasive.

The County's building official, Randy Scheid, also weighed in. He stated that specific fire flow requirements will be addressed during the building permit stage for any proposed structure or occupancy.

It is also worth noting that the resort's Water System Master Plan¹⁴ found that:

"After approval of the final master plan for the resort, the water distribution network will be modeled to determine the final locations of the reservoirs and to determine which zones will require booster pump station in order to maintain adequate pressure and flow for domestic and fire protection uses."

Therefore, water and fire flow capacity and flow requirements are properly deferred until specific application of use consistent with the building official's statements and the Water System Master Plan.

Opponents also argue that building without water places the County's population at risk. This argument is unrelated to the Applicant's request to modify the FWMP. Further, we find that the Applicant is not building without water – it has a valid and non-cancelled water right *and* has obtained approval of a temporary transfer of the Tree Farm Water right.

8. Drought Conditions Warrant Denial of the Application

Many commenters to the record note that Deschutes County remains in a drought. While that may be true, there is no legal authority for us to deny this Application on the basis of a drought. Thornburgh is required to show that the impact of its own water use does not create a net loss or

¹⁴ This further supports our finding that on the ground changes will occur at the third-stage development application stage under DCC 18.113.040.C.

degradation of wildlife habitat, independent of drought conditions. Importantly, Thornburgh has provided expert testimony that shows that even in drought conditions, the 2022 FWMP meets the No Net Loss Standard, which we find persuasive.

Further, as a whole this Board generally agrees with many of the assertions made by Commissioner Chang in his recent February 27, 2023 guest column. Oregon land use law and the land use process provides limited tools to address drought. This is an issue that must be dealt with on a more system approach in collaboration with the largest water users in the basin. As noted in that column, current domestic use of water is only about 45,000 acre feet per year, as opposed to nearly 725,000 acre feet of irrigation use. Thornburgh's overall water use is not substantial in this greater context. Limiting its total water use to a maximum of 1,460 acre feet as required by the 2022 FWMP ensures that its impact will remain minimal.

9. Additional Crooked River Program and Juniper Thinning

At the request of the Tribe, with consultation with the Crooked River Watershed Council ("CRWC"), Thornburgh designed an additional benefit package related to the Crooked River. Thornburgh also provided additional evidence that its juniper tree thinning would be beneficial to stream flows. While the Board is appreciative of both of these measures, the Board finds that these measures are additive and are not necessary nor relied upon to establish that the Application meet the No Net Loss Standard. That standard, as articulated above, is met by the 2022 FWMP and does not include the additive thinning or CRWC measures.

Thornburgh expert Eilers and participant Tim DeBoot also provided comment that Thornburgh's existing juniper thinning efforts are likely to lead to water conservation of 300+ acre-feet of water.

IV. Decision

The Application is **APPROVED**. The 2008 FWMP is replaced in its entirety by the 2022 FWMP. FMP Condition 38 is modified per Thornburgh's request. FMP Condition 40 is imposed, as proposed by the Applicant, to ensure compliance with the 2022 FWMP.

Conditions:

Revised FMP Condition 38: "Thornburgh shall abide by the April 2008 Wildlife Mitigation Plan (excluding the April 21, 2008 FWMP addendum to that plan and its addenda), and all agreements with the BLM and ODFW for management of offsite mitigation efforts. Consistent with the plan, Thornburgh shall submit an annual report to the county detailing mitigation activities that have occurred over the previous year.

FMP Condition 40: Thornburgh shall comply with the 2022 Fish and Wildlife Mitigation Plan, including its compliance and reporting mechanisms found in Section II of that plan. If Thornburgh proposes to further change the source of water or mitigation it may do so during a land use proceeding as part of a third stage development application under DCC 18.113.040.C so

long as evidence in the record shows that the change will not result in a violation of the no net loss standard.

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Issue	Source	Response
GENERAL OVERVIEW		
2022 FWMP is unclear and complex.	Bragar; Hearings Officer, Lambie	<p>The 2022 FWMP is quite simple and based on widely accepted and practiced principles, i) pumping cool groundwater reduces discharge via seeps and springs into the river, ii) restoring groundwater increases cool discharge via springs into the river, iii) restoring surface water flows to a more natural state is positive. The cooler the water restored the better it is for fish habitat. The 2022 FWMP in large part replaces the cool groundwater lost from pumping with cool groundwater from transfers and cancellations and also adds surface water to increase stream flows and reduce temperatures. The scientific analysis shows that streamflows increased while temperatures decreased in virtually all reaches and times. Thornburgh provided extensive modeling of the changes to flow and temperature and retained a Fish Biologist to assess the impacts/benefits to fisheries habitat from the changes to flow and temperature. His conclusions were very clear:</p> <p><i>“In conclusion, the findings presented above indicate that the combination of planned groundwater pumping at Thornburgh Resort, and the associated mitigation planned to offset this pumping as described in the 2022 Fish and Wildlife Mitigation Plan (NCI 2008; Newton 2022), appear to be a net benefit for both fish habitat quantity and quality at all sites evaluated and would result in no net loss of fish habitat quantity or quality.”</i> Lucius Caldwell, Ph.D., FP-C.</p>
ODFW puts a high value on groundwater discharge. Springs and Seeps provide cold water inputs that cool stream temperatures during the summer in streams with depleted flows.	ODFW March 1	<p>A core premise of the 2022 FWMP is to restore discharges of cool groundwater to waterways via seeps and springs that reduce stream temperatures which improved fish habitat. Applicant modeled the groundwater effects from the 2022 FWMP. In all reaches impacted by Thornburgh’s water use, except the Crooked River. Thornburgh’s transfers (restoration) and other measures less its pumping impacts is providing a net benefit by decreasing waterway temperatures overall. The 2022 FWMP provides substantial groundwater inputs that globally offset impacts of pumping on habitat.</p>
Plan not likely and reasonably certain to succeed	Bragar, Hearing Officer, Tribe	<p>The reasons the hearing officer made this statement related to: 1) his questions about compliance; and 2) his view that ODFW didn’t have a chance to respond to applicant’s rebuttal testimony. Since then, the applicant proposed compliance measures and a proposed condition 40 to enforce them. The ODFW letter of January 31 noted acceptance of those measures. In the intervening months ODFW (and anyone else) had an opportunity to respond to applicant’s rebuttal and to suggest additional compliance mechanisms. In the same period, additional extensive expert technical</p>

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		analysis was completed by the applicant’s experts, much of it at the request of ODFW. Ultimately, the additional technical analysis has strengthened the expert conclusions that Thornburgh is providing a net benefit to fisheries habitat.
Comparison to other Resorts is pointless – must meet no net loss/degradation standard	Bragar	<p>The comparison to other Resorts highlights how different the treatment of Thornburgh has been from all other resorts. Eagle Crest used similar measures to benefit fish habitat, namely purchasing water and allowing it to flow for a stretch of the river to accrue benefits, then diverting some of it from the river for its use. This is consistent with what Thornburgh is proposing. ODFW and the County determined that this action provided mitigation of Resort impacts and the Board makes a similar finding in this matter.</p> <p>The fact that other resorts did not have to undergo the analysis of impacts to fisheries is also somewhat relevant. This includes the initial approval of Caldera and Pronghorn resorts and the recent approval of Caldera 2. To the extent other resorts received “approval” from ODFW, those application materials often relied upon single-page letters from ODFW saying they received the habitat analysis and had no objection. Ms. Bragar raises an issue that may have confused ODFW and others, stating other resorts did not need to provide fish mitigation to comply with the no net loss standard because the water used by the Resort was provided by third party providers, ie: Avion water for Pronghorn, Sunriver Utility for Caldera. Because they used different water provider Caldera did not provide any fish or water impact analysis and ODFW did not “approve” or require any. Like Caldera and Pronghorn, Thornburgh’s water supplier Pinnacle Utilities, LLC is a separate entity. In 2018 Pronghorn changed the supply of irrigation water from City of Bend effluent to groundwater pumped from wells at Pronghorn. Despite completely changing the source of the irrigation water the record shows there was no comment from ODFW about the impacts to fish, or the no net loss standard, no comment from Gould or any opponent and nothing from Deschutes County. The difference in the standards applied to Caldera and Pronghorn versus Thornburgh is striking.</p>
The BOCC is being asked to choose between the 2008 and 2022 FWMP.	Commissioner Chang	Thornburgh is not asking the BOCC to choose between plans although the 2022 FWMP is far superior to the 2008 plan in numerous ways, including: i) 35% reduction in water use, ii) the 2022 plan uses in-kind transfer or mitigation (groundwater for groundwater), iii) the 2022 water is much cooler, 13.2 degrees vs. 17 degrees, iv) the

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		<p>2022 provides benefits in locations much more proximate to the impacts, v) the 2022 plan provides substantial benefits into the Crooked River whereas none are provided by the 2008 plan, vi) the 2022 plan provides more effective mitigation than the 2008 plan, vii) the 2022 plan results in reduced stream temperatures an average reduction of 0.01 degrees C vs. an increase of 0.07 degrees C in the 2008 plan, viii) the 2022 plan provides benefits (up to 24,654 AF) far in advance of impacts and no such benefits were provided by the 2008 plan, ix) the 2022 technical analysis was far superior. This is discussed in greater detail in Thornburgh’s March 8 memo.</p> <p>In addition, in response to a request from the Tribes, Thornburgh has entered into a Memorandum of Understanding with the Crooked River Watershed Council to provide in excess of \$400,000 in funding to improve 11 miles of the riparian habitat in the Crooked River and to clear 1,050 acres of Juniper trees in the Crooked River watershed. Together these actions will improve fish habitat and increase streamflow. These measures are not, however, relied on to find compliance with the no net loss/degradation standard. Neither Thornburgh nor the County is relying upon them as such; they are a stand-alone benefits offered to respond to the concerns of the Tribes regarding issues other than the no net loss/degradation test.</p>
<p>Need independent verification of modeling results.</p>	<p>Commissioner Chang</p>	<p>Mr. Lambie, Ms. Gould’s technical expert provided independent verification of the applicant’s modeling results. Mr. Lambie used the same GSFlow modeling tool employed by Thornburgh to verify Thornburgh’s modeling results. He agreed with the Resort’s findings regarding: i) the drawdown or impacts to neighboring wells where his results and that of Four Peaks are similar, and ii) the impacts to the Crooked River, where Mr. Lambie states there is no disagreement. Since Mr. Lambie was using the same modeling tool as Thornburgh, he was able to check Thornburgh’s results in all areas, yet he only reported his results where Thornburgh showed reductions to streamflow, the Crooked River. Mr. Lambie is silent regarding his modeling results for all other areas where Thornburgh was providing benefits. Had Mr. Lambie’s modeling been in conflict with Thornburgh in any other areas he would have certainly raised Thornburgh’s errors.</p>
<p>The Tribes feel other habitat and riparian restoration should be required as quantifiable, transparent, and reliable.</p>	<p>Tribes – March 1 March 8 Letters</p>	<p>The sentiment of the Tribes is appreciated, however the context of the Tribes’ comments are largely related to impacts that are not caused by Thornburgh, including the HCP. Thornburgh is only required to mitigate for its own impacts.</p>

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<p>The Tribes support the creation of a mitigation fund focused on improving the ecological function of the Crooked river to benefit aquatic species. The Tribe supports applicants outreach to the CWRC.</p>		<p>While the partnership with the CRWC will provide substantial benefits to the fisheries habitat in the lower Crooked River it has not been relied on by the applicant in showing compliance with the no net loss standard.</p>
<p>Advance mitigation not creditable because achieved prior to impacts of pumping.</p> <p>Compliance reporting improperly counts temporary mitigation credits as accumulating over time. They are only useful at the time of water use.</p>	<p>Bragar/Lambie</p>	<p>This is a silly argument. It essentially claims that if you do good, it doesn't matter unless you do something bad at the same time. Fortunately, the world doesn't embrace that concept. Mr. Lambie speaks to the temporal nature of the advance mitigation, claiming fish swimming in warm water in 2029 don't care about mitigation provided in 2019. While true, the fish swimming in Whychus Creek in 2019 benefitted from the TSID and Dutch Pacific waters that Thornburgh restored to the creek. The same is true of the fish swimming in the Deschutes in 2021 benefitting from the BFR, Tree Farm, and LeBeau water Thornburgh restored to the river. The same will occur in 2023, 2024 and on. The benefits Thornburgh is providing will exist year after year for a very long time before the impacts from the resort pumping comes close to the benefits it is providing to the fisheries habitat every year, which began more than a decade ago. According to Mr. Newton these excess benefits will likely occur for decades as the development will be developed over an extensive period.</p> <p>Additionally, the standard is, which is no net loss or degradation, can correctly consider advanced benefits to the overall picture. While the FWMP works in the future as well, the advance benefits should not be overlooked because they will assure success for a significant period of time into the future.</p>
<p>WET, RELIABLE, LEGALLY PROTECTED WATER</p>		
<p>The 2022 FWMP does not provide "wet water"</p>	<p>Bragar, Lipscomb, et al</p>	<p>False. All the Thornburgh water rights are wet water as defined by Messrs. Lambie and Newton, both Certified Water Rights Examiners (CWRE), as water rights that govern water that is actually available.</p> <p>ORS 537.270 provides that a water right certificate "shall be conclusive evidence of the priority and extent of the appropriation therein described in any proceeding in any court or tribunal of the state, except in those cases where the rights of</p>

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		appropriation thereby described have been abandoned subsequent to issuance of the certificate.” This means that it is entirely appropriate to rely upon existing certificated water rights as “wet water.”
No “cancellation in-lieu” in Oregon law	Bragar, Lambie	Mr. Lambie himself refutes this stating “ <i>What Thornburgh calls in-lieu of mitigation would be in actuality their use of OWRD’s Offset and Voluntary Cancellation Option. If Thornburgh successfully cancels a groundwater right and receives recognition of a mitigation to one of its groundwater rights by OWRD such as Permit G-17036 then this would be evidence of mitigation water for that groundwater right.</i> ” See E-Pur memo, dated 2/23/23, pg. 19. This program is commonly referred to as Cancellation in lieu of mitigation.
Cancellation of water rights not an acceptable form of mitigation because a junior water right holder can “pull water;” it does not provide wet water	Bragar, Anuta	This is false. Both Mr. Newton and Mr. Lambie have noted voluntary cancellation is an acceptable form of OWRD mitigation. Furthermore, Mr. Newton has stated that the cessation of groundwater pumping when it occurs, leaves the water in the aquifer where it will flow to and be discharged into the rivers. The claim that a junior holder will pull water is false and shows a lack of knowledge of the Deschutes Basin and its rules. The aquifer is vast, and the evidence shows the watermaster has not regulated any groundwater or surface water rights off. This means enough water exists for all water rights, even the junior holders.
Cancellation or transfer of water rights provides no legal protection to instream flow	ODFW March 1 – Letter	This is false as noted above. ODFW’s comments belie its lack of understanding of Oregon water law. ODFW has made it clear that they do not agree with OWRD laws that provide legal protection to the water, including the Deschutes Basin Groundwater Program which accepts cancellation as mitigation and allow water rights transfers because neither increase the amount of water withdrawn from the basin. The discussion above shows cancellation legally protects water instream, and is specifically permitted in OWRD’s rules. <i>See e.g., OAR 690-505-0610(3); (8).</i> The expert testimony from Mr. Newton in the 2022 FWMP and the CGE memo shows that transfers and cancellations both provide legally protected water. A transfer acts similarly in that it stops the appropriation from one point and moves it to another. The BFR transfer from Deep Canyon to BFR wells (T-12651) states: “[t]he original point of diversion of surface water shall not be retained as an additional or supplemental point of diversion under the transferred portion of the right.” Deep Canyon Creek is still the source which protects the water in Deep Canyon Creek. The same will be the case after the point of appropriation is transferred to Thornburgh. It will still be protected from in Deep Canyon Creek.

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<p>Thornburgh did not provide ODFW with information needed to show that the water rights it owns are “reliable”</p> <p>Thornburgh has failed to demonstrate the “reliability” of its water rights.</p> <p>Tree Farm and Dutch Pacific water rights do not have regular past use LeBeau has partial use only so “inconclusive”.</p> <p>Elizabeth Howard, Thornburgh water lawyer provided email showing Tree Farm water is not reliable.</p>	<p>Bragar/ODFW</p>	<p>This is false. Applicant provided 22 years of well logs for the BFR water, 10+ years of aerial photos showing use of the LeBeau water and Mr. Newton provided evidence he had personally inspected the LeBeau property for use in 2018. Applicant submitted affidavits of use of the full amount of the Tree Farm water rights by Kirk Schueler, CEO of Brooks Resources, Inc. (previous owner of the water right), plus numerous OWRD approved transfers from the Tree Farm to Thornburgh and other buyers of the Tree Farm water rights. Ms. Howard, Thornburgh’s water lawyer stated the Tree Farm rights are quasi-municipal rights that do not have the same use requirements as irrigation rights and, therefore, those standards should not be applied to judge the reliability of those rights. Evidence also shows that there were multiple offers to purchase Thornburgh’s Tree Farm water, including an offer by the City of Bend. It is undisputed the Tree Farm water rights, if not purchased by Thornburgh, would have been purchased and would have been rights that could be relied on by the new owner to pump the full amount of water authorized by the Tree Farm permit. The permit, therefore, provides reliable water. Applicant provided photos of use for the Dutch Pacific water rights and final orders on the TSID water that shows it is permanently protected instream. No party showed any evidence to the contrary. All of the above are routinely accepted and acknowledged actions, particularly when performed by CWRE and “qualified” water lawyers.</p> <p>ODFW is the state’s agency that oversees Fish and Wildlife. They are not the state’s experts on water law. ODFW arguments regarding water law, therefore, do not constitute expert evidence. ODFW’s testimony as it relates to the reliability of water are rejected because they are not supported in law or fact. A valid water right allows full use of the water from this day forward. It’s prior use, if not sufficient to result in cancellation of permit, does not reduce the amount of water that may be pumped under the permit at the time Thornburgh pumps groundwater, if the right is not transferred. Discontinuing this future potential use provides a full benefit to area waterways.</p> <p>ORS 537.270 is also determinative as to whether water exists and is reliable.</p>
<p>2022 FWMP does not provide legal protection of cold, spring-fed water in close proximity to the</p>	<p>ODFW March 1 – Letter</p>	<p>This is false. The modeling shows the 2022 FWMP provides cold(er) actual spring water discharges in numerous places that are much more proximate to the impacts than the 2008 FWMP, including in the Deschutes River, the Crooked River and Whychus Creek. Further, ODFW as noted above are the experts on Fish and Wildlife.</p>

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<p>point of impact as it did in the 2008 FWMP</p>		<p>They are not the experts on water law or on issues related to the modeling of water quality. Thornburgh’s technical team are experts on those issues and have shown that the 2022 FWMP provides protection of cold, spring-fed water in close proximity to the points of impact of Thornburgh’s water use.</p> <p>ODFW also makes conflicting claims. On one hand, it says water law is insufficient. On the other it says the only mitigation measure it will accept is legally protected flows of water via a transfer in stream. As noted in OWRD’s rules and as noted by Mr. Lambie and Mr. Newton, this is not the only method to provide legally protected flows. Additionally, measures that provide actual mitigation that do not qualify as Deschutes Basin Groundwater Program mitigation also merit consideration in determining compliance with the no net loss/degradation test. For example, the TSID mitigation found by the County and LUBA to meet the no net loss test for Whychus Creek does not qualify to authorize pumping under the OWRD program but it actually mitigates for impacts of the Resort’s pumping.</p>
<p>ODFW cannot find that the 2022 Plan will yield reliable, legally protected “wet water” that results in no net loss/degradation</p>	<p>ODFW March 1 – Letter</p>	<p>All the water in the 2022 FWMP has been shown by the applicant to be wet and reliable water. All water rights allow the holder of the permit to pump actual water from the ground or waterways in the full amount allocated. Applicant also provided a wealth of technical science showing compliance with the no net loss standard. ODFW for their part has stated they have not analyzed the modeling efforts, nor would they, until standards they invented pertaining to “reliability” that lack any basis in law were met.</p>
<p>Applicant is required to show Deep Canyon Creek has 5.5 cfs of flow in it, that it does not have.</p>	<p>Anuta</p>	<p>This is incorrect. Mr. Anuta in referring to the 2008 FWMP claims the applicant must show Deep Canyon Creek has 5.5 cfs of flow in it. The 2008 FWMP is not applicable to this proceeding as it is being changed. Even under the 2008 plan, however, the applicant was not required to show proof of any particular flow in Deep Canyon Creek. Anuta cites to no authority that would require such a showing. Additionally, the 2008 FWMP does not require that level of flow, it only says that the expected mitigation measures which were the purchase of certain water right may lead to an anticipated flow of 5.5 cfs.</p>
<p>None of these rights are certain to achieve no net loss to the system and no potential impacts to the resource</p>	<p>ODFW March 1 – Letter</p>	<p>No single measure or right meets the no net loss standard on its own nor must it. Instead, the Applicant must review the totality of the impacts of its actions to address this test. The applicant has done so by undertaking extensive modeling of GW flows and the thermal impacts from the plan and by providing more than 20 expert</p>

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		technical reports and memos that conclude that the use of the rights as described in the 2022 FWMP will meet the no net loss standard. Included in the technical analysis was a comprehensive summary of the impacts on fish habitat by Lucius Caldwell, PhD, who concluded the 2022 FWMP would provided net benefits to the fish habitat quantity and quality at all sites evaluated.
Plan does not adequately address impacts to the Crooked River Wet water impacts to the Crooked River and elsewhere must be identified and assessed	Bragar, Tribe, Lambie	The impacts to flow were extensively modeled and studied using the GSFlow program to determine the impacts to the Crooked River while the changes to temperature were extensively modeled using the QUAL2Kw program. The impacts to fisheries habitat from that modeling was then analyzed and assessed. This detailed analysis included the impacts and benefits to the Crooked River which showed mitigation flows into the Crooked River from the 2022 FWMP, which was supported by Mr. Lambie who stated the transfer of BFR groundwater will provide flows into the Crooked River. In all cases, the changes in streamflow were minimal and the change to temperature was positive at times and negative at other times but in all cases was effectively zero. ODFW determined, from the point of biological significance, that these changes felt in the Crooked River were “noise”. Dr. Caldwell assessed the impacts to the fisheries in the Crooked River and concluded the 2022 FWMP would provide net benefits to fish habitat quality and quantity at all sites evaluated. We agree with ODFW on this point.
Improper to defer review of compliance with FWMP to OWRD to establish wet water	Bragar	OWRD is the agency tasked with determining compliance with water laws. Further, as noted above the evidence shows the Thornburgh water is wet water. Gould has previously lost on this same issue.
OWRD/ODFW RULES/APPROVALS		
ODFW would not approve the 2008 FWMP today. ODFW raises issues about the availability or efficacy of the 2008 Mitigation water.	Bragar, ODFW	While the evidence shows the 2022 FWMP is far superior to the 2008 plan in almost every metric, the 2008 plan is approved and is past all appeals. But the question isn’t how bad or good the 2008 plan is. The question is how good the 2022 plan is, specifically does it meet the no net loss standard. The evidence shows the 2022 FWMP provides a net benefit to fisheries habitat, exceeding the requirements of the no net loss standard. The evidence also shows that the plan offers excess benefits over those required to meet that standard. Additionally, the standard does not require ODFW approval. It is a county standard only.

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<p>OWRD mitigation does not ensure compliance with no net loss</p>	<p>Bragar/Lambie</p>	<p>In virtually all other resort approvals OWRD mitigation was shown to meet the no net loss standard. Until Thornburgh, only a portion of Eagle Crest approvals provided anything other than OWRD mitigation. That said Thornburgh has provided over 20 technical reports and memos that show how it is meeting (or exceeding) the no net loss standard.</p> <p>In fact, the County has previously rejected calls by ODFW and others to require additional mitigation – including mitigation specifically requested by ODFW.</p>
<p>OWRD Permit G-17036 is cancelled, expired, void</p>	<p>Numerous, including Bragar, COLW, Lipscomb</p>	<p>Per OWRD, the permit is “non-cancelled.” Per LUBA and Court of Appeals, this satisfies Condition 10 (assuming it is determined to be relevant). Per Court of Appeals, 2008 FWMP is not dependent on G-17036.</p>
<p>Water law and OWRD mitigation does not assure compliance with no net loss</p>	<p>ODFW March 1 – Bragar March 1 – Lambie Feb, 23</p>	<p>ODFW claims water law doesn’t assure compliance then contradicts itself when relies on “legally protected” instream water rights, which is simply a legal designation created by law and documented with paper. In a conversation with ODFW, Mr. DeLashmutt was told ‘it was easier for them (ODFW) to keep track of the in stream water rights’. Instead of focusing on what was easier for ODFW the 2022 FWMP goes beyond water law and relies on certain specific water rights that have been shown to address water quality and quantity issues relevant to compliance with the no net loss test.</p>
<p>Holding a water certificate does not authorize pumping and offers no guarantees that the amount appropriated will be available for use or that use won’t injure a senior right or degrade the environment.</p>	<p>ODFW March 1 – Letter</p>	<p>The evidence shows no groundwater rights have been regulated off or that any of Thornburgh’s water rights are likely to be regulated off. More importantly here, ODFW is making the case that water law does work. For example, if a Thornburgh certificate cannot pump water and is regulated off the Resort will not be able to use that water right to pump water. As a result, there will be no impact to the fisheries resource. Condition 40 will require review of replacement water rights to assure continued compliance with the no net loss test.</p>
<p>Neither OWRD nor ODFW have approved the water rights the Applicant relies on in the 2022 FWMP; premature to approve before approval of new water rights transfers</p>	<p>Bragar, Lipscomb, Anuta, et al</p>	<p>This is not required and obviously was not needed for approval of the 2008 FWMP. At that time, Thornburgh did not own any of the water, had not applied for the transfer of any of the water, and had not provided any mitigation that would ultimately be needed. By contrast today the evidence shows Thornburgh owns all 1211 AF of water, is already providing 1011 AF of the mitigation in advance by leaving all the groundwater in the aquifer, leased instream 200 AF of the LeBeau surface water in 2021, and has provided 100% of the TSID mitigation water years in advance of when</p>

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		<p>required. Furthermore, transfer applications have been submitted for all the water rights and the first transfer application has been approved.</p> <p>We believe that the measures provided in the 2022 FWMP are feasible and not precluded by law. As such, Thornburgh and the County properly rely upon the measures outlined in the 2022 FWMP for compliance with the no net loss standard and that they are reasonably likely to achieve compliance with the no net loss test.</p>
ODFW has not approved the 2022 FWMP	Bragar, COLW	<p>ODFW states the 2022 FWMP has merits but that they did not undertake a technical review of the plan or its extensive modeling, and that they would not do so as they were not satisfied with the LeBeau or Tree Farm water rights (they accept the BFR water). ODFW is attempting to implement a standard of use that is not consistent with state water law. It disagrees with OWRD, the agency that governs Oregon water rights. Further, ODFW has approved the compliance measures proposed by the applicant included in the 2022 FWMP as noted in their hearing letter and those measures have been strengthened by this decision. No provision of the CMP/FMP or County code requires ODFW approval of a fish and wildlife management plan (FWMP), or specifically a plan related to the mitigation of impacts on fish. The evidence further shows ODFW has not requested, required, nor approved any plan addressing all impacts to fish of any other resort.</p> <p>The County has also previously declined to require ODFW requested mitigation measures as it relates to resort impacts. We do so again here.</p>
Per ODFW, plan must replace surface water quality and quantity in perpetuity or for the life of the project and result in documented improvements to habitat quality and quantity	Bragar	<p>DCC 18.113.070(d) does not require improvements to habitat quality and quantity. The evidence in the record shows that the 2022 FWMP will achieve compliance with the no net loss/degradation test by replacing the loss of surface water due to Thornburgh’s pumping, in large part with cool groundwater, along with some cool surface water mitigation. This will be a benefit offered in perpetuity and the life of the Resort and a plan that is reasonably likely to succeed. The modeling done documents the benefits to habitat quality and quantity.</p> <p>Nothing in the no net loss standard prescribes a certain measure, only that the applicant prove its impacts are mitigated. Thornburgh has done so.</p>
More water will be leaving the system after the Resort starts	ODFW March 1 – Letter	<p>This is false. The evidence shows very consistent use of the vast majority of Thornburgh’s water, all of which it owns, while presently using none of those rights. If</p>

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<p>pumping than is leaving the system now with limited use of water rights purchased by Thornburgh</p>		<p>Thornburgh sold those rights another party would likely use them to their full rate and duty and not leave them in the system as Thornburgh does to provide excess benefit now.</p> <p>Evidence also shows that Thornburgh will have a very gradual increase of water use even after it begins pumping as the development will occur over a long period. The result is that more water is left in the system than will be taken from it, with full stability peaking in the next few decades. Even at that time Thornburgh’s plan meets the no net loss period based upon the evidence submitted.</p>
<p>A fish plan is necessary because water law does not address impairment of water quality (temperature)</p>	<p>ODFW March 1 – Letter</p>	<p>The applicant has provided a fish plan and assessment of impacts that demonstrates that the proposed water rights transfers and mitigation will not impair water quality.</p>
<p>ODFW continues to have concerns re localized impacts of groundwater pumping on springs.</p>	<p>ODFW March 1 – Letter</p>	<p>ODFW has been provided extensive and detailed scientific data by qualified experts on the impacts and benefits to springs using state of the art modeling tools prepared by experienced and educated scientists. By their own admission that have not analyzed the modeling results, so any concerns are not based in science or fact.</p>
<p>Ensuring no net loss requires off-setting impacts under the “worst-case-scenario”</p>	<p>ODFW March 1 – Letter</p>	<p>A “worst-case-scenario” analysis, if required would, far exceed the requirements of the no net loss standard that looks to the bigger picture, which is the sum of all the impacts plus all the benefits.</p> <p>The resort must analyze its own impacts and prove that its impacts are mitigated. The dozens of technical reports do this. ODFW submitted comments on March 1st that used incorrect assumptions and data. Thornburgh’s experts provided a response to ODFW two days before the rebuttal period ended, and ODFW chose not to respond to its own errors. ODFW’s concerns and unrealistic comments are not grounded in fact or scientific method. As a result, their opinion is less credible than that provided by Thornburgh’s experts.</p>
<p>Mitigation utilizing surface water quality and quantity must be replaced in perpetuity or for the life of the project. The FWMP must provide future monitoring of results with “recourse for parties</p>	<p>ODFW March 1 – Letter</p>	<p>The technical evidence applicant provided shows the groundwater used in the 2022 FWMP is superior to the surface water relied on by the 2008 FWMP in both quality and quantity, resulting in increased flows and reduced temperatures across virtually all reaches at most all times. Deschutes County relies upon the technical reports and analysis that the 2022 FWMP plan works today and works in to the future.</p>

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to reconvene if expected outcomes and environmental effect are not achieved.” This is also required to meet the legal test.		Further, there is no recourse, and no monitoring of the type requested by ODFW required by the no net loss standard of DCC 187.113.070(D). The reporting and compliance measures of the 2022 FWMP and Conditions 38 (revised) and 40 are sufficient to assure compliance with the FWMP and, consequently, the no net loss test.
Increased groundwater withdrawal degrades habitat	ODFW March 1 – Letter	The applicant is not increasing groundwater withdrawals over withdrawals authorized to occur in the basin by existing water rights. More important is the fact that the applicant is reducing its groundwater withdrawals by nearly 1/3 rd .
Thornburgh experts claim groundwater in Deschutes Basin is stable; it is not	ODFW March 1 – Letter	Thornburgh’s experts utilized the USGS GSFlow modeling tool that was based on real information collected by the USGS and OWRD between 2001-2015. The results from Thornburgh’s GSFlow data reflect actual groundwater data within that period. All parties agree that groundwater recharge in the basin is robust, far exceeding withdrawal rates. Only a small percentage is currently withdrawn and a 200 CFS cap in groundwater exists in the basin. The 2022 FWMP exists within this cap because it relies on existing and usable water rights.
COMPLIANCE AND REPORTING		
FWMP lacks adequate and clear reporting requirements	Bragar/Hearings Officer	While the hearing found this, he cited language dealing with compliance that was found in the Burden of Proof that was not in the FWMP itself. Subsequently, applicant worked with ODFW to develop language acceptable to them and would provide clear compliance and reporting language. <i>The applicant has provided draft language to ODFW that will be proposed as a new Condition 40. This language outlines reporting requirements to track water use and status of water right transfers that ODFW can support, though final language has not yet been reviewed and will need to be verified as acceptable to be the case.</i> ODFW 1/31. Applicant made no changes to the compliance language ODFW accepted. That language is included in the FWMP. The new Condition 40 ensures compliance.
2023 FWMP and Conditions 38 and 40 fail to provide a clear plan that is reasonably likely to succeed for the life of the project	Bragar	Condition 38 has been amended so that it is clear. Compliance and reporting language has been added to the FMWP as noted above that was consistent with the hearing officer finding, and acceptable to ODFW. Condition 40 ensures compliance.
Reporting requirements in most recent version of 2022 FWMP and Condition 40 fall woefully short of	Bragar	As noted above the language was consistent with language the hearing officer noted and that ODFW found acceptable.

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providing clear performance standards		
2023 FWMP and Condition 38 limit report to the County – County must initiate reporting program	Bragar	This is false. The 2022 FWMP requires reporting to the County and to ODFW no later than December 31 st of each year of a range of elements.
Leaving Condition 38 in place is confusing	Bragar	Condition 38 has been amended for clarity. It was submitted by applicant at the hearing.
Want stronger language re compliance monitoring to ensure predicted benefits are maintained over time.	ODFW March 1 – Letter	The no net loss standard does not require monitoring. All the water rights are already owned, and in almost all cases the mitigation is already being provided. The annual reporting detailed in the FWMP (agreed to by ODFW) will ensure the benefits are maintained over time.
Reporting on a nonexistent water right makes no sense (presumably G-17036)	Bragar	While it is unclear what Ms. Bragar refers to, we will assume that it is G-17036. The evidence shows that G-17036 is in force, and non-cancelled. This is a claim that opponents have made dozens of times that have been soundly rejected by the courts (LUBA, the Court of Appeals, and the Oregon Supreme Court).
INDIVIDUAL WATER RIGHTS, MITIGATION & RESULTS		
Cancellation of Tree Farm certificate won't mitigate for impacts of Resort because it is in a different zone of impact – can't mitigate for the Crooked River	Bragar March 1 Lambie Feb 23	The no net loss standard does not require that each individual component of the FWMP mitigate for each individual impact. The NNL standard requires that the plan results in no net loss overall. The issue is not whether the Tree Farm right mitigates in the Crooked River. It is whether the plan in its entirety results in NNL which the science resounding shows is the case.
Fails to provide habitat quality evaluation and identify mitigation water for water pumped under Tree Farm permit	Bragar March 1 Lambie Feb 23	As noted in the plan the transfer does not require mitigation. It is moving an existing right from the Tree Farm wells to Thornburgh. This does not increase impacts but can change the location and timing of the impact. Thornburgh experts analyzed that question in extensive detail and determined the 2022 FWMP exceeded the NNL.
Transfer of Tree Farm unlikely to succeed do to different impacts.	Lambie Feb. 23	OWRD has approved a temporary transfer of the Tree Farm water right to the resort, disproving Mr. Lambies claim that such a transfer will not be approved.
Dutch Pacific can't be used to mitigate impacts of pumping because it is from a different zone of impact. It is not mitigation and its transfer was denied.	Bragar/Lambie	There is no dispute that Thornburgh pumping impacts streamflow in Whychus Creek, which was of concern during review of the 2008 plan, and the source of numerous questions by Jerry George, ODFW in this proceeding. Extensive modeling done as a result shows the Dutch Pacific water is providing additional flow and thermal benefits to Whychus Creek. OWRD's denial of a transfer does not mean that not pumping it

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		does not offer the mitigation benefits to the no net loss standard. Whether transferred or cancelled or not it offers documented benefits to habitat and achieve compliance with the no net loss standard.
TSID water cannot be used to mitigate for impacts to Whychus Creek	Bragar March 1 Lambie Feb 23	It has been settled by approval of the FMP and LUBA that TSID water mitigates for all resort impacts to Whychus Creek, including Lower Whychus Creek.
LeBeau certificate cannot mitigate for impacts to the Crooked River	Bragar March 1 Lambie Feb 23	As noted above the no net loss standard does not require that each component of the FWMP provide mitigation for each individual impact. Rather the FWMP in its entirety must result in no net loss to the resource.
Thornburgh does not provide habitat quality evaluation or identify mitigation water for reduced Crooked River flows impacted by BFR certificates and T-14074	Bragar March 1 Lambie Feb 23	Similarly, the standard does not require that Thornburgh analyze each individual component for its individual impacts as the standard is the overall impacts versus the overall benefits. There was substantial analysis on flow and temperature done on the Crooked River. The result is that the 2022 FWMP provides significant GW discharge into the Crooked River.
No mitigation for Deep Canyon Creek water. Thornburgh must protect the source of BFR water.	Bragar March 1 Lambie Feb 23	The Deep Canyon water is being transferred (or cancelled in lieu) to Thornburgh wells which does not require mitigation. Any assertion this requires mitigation is false and not supported by the evidence or expert testimony. As noted above the no net loss standard does not require an analysis of each component of the plan, only that the plan in its entirety meet the no net loss standard.
Cold water in Deep Canyon Creek is replaced by groundwater from other sources of warmer water	Lipscomb	This is completely false. The evidence shows the opposite. The GW is roughly 11 degrees or less while the Deep Canyon Creek is 13 degrees. Further, the temperature of mitigation water in the 2022 FWMP is cooler (13.2 degrees) than the 2008 mitigation water (17 degrees). Thornburgh experts modeled stream and river temperatures resulting from transfers to prove this point.
Thornburgh wrong to claim source of resort water supply is exclusively groundwater because Little Deschutes River and Big Falls Ranch water is surface water	Bragar March 1 Lambie Feb 23	The source of the resort's water is the regional aquifer and is accessed by wells on the Resort's property. Mr. Lambie is confused.
No proposed groundwater rights provide thermal improvements	Bragar March 1 Lambie Feb 23	This is blatantly false and is contrary to the widely accepted fact that discharge of cool groundwater cools the stream. The reduction of GW seeps is shown to increase temperature which is not debated. The converse is true, increasing GW seeps reduces

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		temperature. Extensive modeling which is undisputed shows the return of GW from the 2022 FWMP reduces temperature in nearly all reaches at most all times.
The Tribes had a question about the assumptions and the modeling inputs.	Tribes	In response the RSI memo dated March 7, 2023, states that the modeling inputs and methods RSI used in providing QUAL2Kw thermal modeling were <i>“the same as those applied in the analysis of water quality conditions in the lower Deschutes River prepared for PGE and the CTWS (Eilers and Vache 2021; Eilers et al. 2022)”</i> See: RSI response to ODFW and CWTS, dated March 7, 2023.
Providing cold water upstream in Whychus Creek that warms as it flows to Lower Whychus Creek does not offset degradation of important cold, groundwater resource in Lower Whychus Creek	ODFW March 1 – Letter	Providing cool water upstream (TSID mitigation), even though it warms, results in lower water temperatures in Lower Whychus Creek. This issue has been litigated and settled. <i>Gould v. Deschutes County</i> , 78 Or LUBA 118 (2018). Not only is this settled science, but it is embraced and accepted across the state. The continued insistence to the contrary by Mr. George, ODFW Fish Biologist, is troubling as noted by Professional Hydrologist Joseph Eilers, RSI who states: <i>“The ODFW objection to adding flows to Whychus Creek raises a wider issue regarding approaches to mitigation. The notion that flows upstream of springs should not be increased where possible is counter to all major efforts around the state where the single greatest need for stream habitat is additional flow, particularly where agricultural usage has resulted in loss of streamflow. It also conflicts with ODFW previous support of flow restoration measures in Whychus Creek.”</i>
Whychus Creek not reliable – modeled hydrology at River Mile 5.6 is 21 cfs high than “observed hydrology; at Camp Polk Modeled temperatures a poor fit with UWDC observed temperatures; applicant has not responded to request for information on this issue	ODFW March 1 – Letter	This is false. Mr. George raised questions on 2/14. RSI fully discussed the issues w/Mr. George, including an email response on 2/25 refuting the issues raised. RSI wrote a further response to the 3/1 ODFW letter that refuted their claims, pointing out that the issues was fully discussed with Mr. George, and that the information from Mr. George used faulty data, and explaining what was correct and why. Further RSI pointed out the results from Mr. George were obtained using a very rudimentary and simple equation that does not fully account for actual circumstances whereas the QUAL2Kw is vastly more sophisticated and provides far better modeling results. Mr. George is not a trained hydrologist, or water scientist and the methods he uses are simple. He is not an expert, and his comments should be disregarded.
Jan Neuman 11/7/2022 conceded the impossibility of permanent placement of BFR mitigation water	Bragar	That is false. Ms. Neuman never stated that. What Ms. Neuman did say was that Ms. Gould, and Mr. Lambie have repeatedly stated water did not flow in the creek at all and as such there was no mitigation value to the Deep Canyon water. When the

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into Deep Canyon Creek as an instream water right		evidence showed that to be false their argument morphed, into now Mr. Anuta claims that there is not 5.5 cfs of flow in the creek.
No proof that irrigation season water rights will provide year-round mitigation	Bragar	This is false. ODFW raised this issue and applicant responded. The Tree Farm certificate is a year-round water right that provides year-round mitigation. Further applicant, RSI, and Four Peaks have provided analysis as to why the irrigation season is the important period to assess for fish habitat and since the 2022 FWMP meets the no net loss standard during the irrigation season it meets it for the whole year.
DROUGHT AND DROPPING GROUNDWATER		
Well impacts to surrounding property owners are not resolved	Bragar	This is false. The issue settled by approval of the CMP and FMP which included the well indemnification agreement that Thornburgh voluntarily agreed to. Furthermore, evidence in these proceedings show that impacts to neighboring wells are very slight, ie: according to Mr. Lambie, Ms. Gould’s well (near Thornburgh) will experience 4” of drawdown from Thornburgh pumping. Mr. Newtons testimony shows this minimal drawdown will have no effect on Gould’s pumping.
The aquifer lacks the capacity to permit Thornburgh to pump water for Resort uses. County is in an historic drought; water not available	COLW, Bragar	This is false. OAR 690-300-0010 provides that “water is available” when “[t]he requested source is not over-appropriated under OAR 690-400-0010 and 690-410-0070 during any period of the proposed use.” Groundwater is over-appropriated when “[t]he appropriation of groundwater resources by all water rights exceeds the average annual recharge to a groundwater source over the period of record or results in the further depletion of already over-appropriated surface waters.” OAR 690-400-0010(11). The evidence <i>clearly</i> shows GW is not over-appropriated having annual recharge of roughly 3.5 million AF as opposed to 50,000 AF of GW use. See CGE hearing presentation and Commissioner Chang op-ed notes annual recharge is _____ AF vs. use of 45,00 AF.
Dropping groundwater	COLW, Bragar, Lambie, ODFW and others	Evidence shows groundwater has been dropping since before Thornburgh received approval of its CMP. It is not required to mitigate for events that it is not impacting. Expert testimony by Lambie, Four Peaks, and Newton all show impacts from Thornburgh pumping will be negligible on GW levels, including a minimal decline in Ms. Gould’s well as noted by Mr. Lambie.
Integrated Water Resources Strategy calls for additional groundwater investigations and	ODFW March 1 – Report	Not relevant as not tied to no net loss/degradation.

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improved water resources data collection		
2021 Groundwater Resource Concerns Assessment shows that some townships identified as “significant concern” may warrant further study and possible inclusion in a new or expanded groundwater study area	ODFW March 1 – Report	Most of Central Oregon is not in this category; no link has been made to the Resort property or the no net loss standard.
80% of groundwater permits and ltd licenses requested since 2010 are in areas of concern or significant concern – further development may exacerbate negative impacts and conflicts between users. This issue needs to be studied.	ODFW March 1 – Report	This is not linked to the no net loss/degradation standard. Since the Resort is transferring existing water rights, it is not creating a new water use. The issue in this application is not the availability of water to serve the Resort.
Over half of Oregon lacks readily available water data to evaluate groundwater concerns. Funding is needed.	ODFW March 1 – Report	The groundwater analysis provided by the applicant was able to utilize a wealth of information regarding groundwater and streamflows to provide a reliable assessment of water impacts and benefits.
Groundwater declines impact critically important habitat for native trout, salmon and whitefish in the Deschutes River	ODFW March 1 – Letter	The no net loss/degradation test assesses the impact of the Resort’s water use and mitigation measures. The impact of groundwater declines on habitat is not attributable to the Resort; particularly given the fact it is using existing water rights.
Climate change	Lipscomb and many others	The no net loss standard does not require Thornburgh to mitigate for events outside of its control, only the impacts it creates.
SCOPING AND BASELINE		
Environmental baseline not scoped with public agencies – done by private consultants. This is not the standard, logical manner. The underlying assumptions of the model need to	ODFW March 1 – Letter	This is false. It is also ironic ODFW makes this claim when they had no comments regarding the no net loss standard during the proceedings on Pronghorn, Caldera 1 or 2. Also, as noted in Mr. Eilers memo, the Thornburgh technical team includes 3 Ph.D.’s, a scientist with a master’s degree in Water Quality Management, another who is a CWRE, a PE and a registered Geologist. ODFW does not have the same level of technical skill or experience in related modeling disciplines. That said, ODFW’s

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<p>be verified before ODFW can concur that the models and outputs are valid,</p>		<p>summary of what Thornburgh did, and the process taken is incorrect as discussed in Thornburgh’s 3/8 rebuttal, Ex. BOCC-33.</p>
<p>ODFW uncertain if model inputs accurately reflect basin conditions which may be providing false outputs.</p>	<p>ODFW March 1 – Letter</p>	<p>ODFW received extensive scientific results and had complete access to the entire Thornburgh technical team to ask questions and get details as requested. While ODFW stated they did not analyze the model Mr. George, the ODFW Bend District Fish Biologist interacted with Mr. Eilers, RSI on inputs, outputs, and conditions only as it related to Whychus Creek. Details on this are above in the discussion of Whychus Creek. As noted above Mr. George is not an expert in water.</p>
<p>Model inputs should rely on past water use (ODFW reliability issue) and current basin conditions; Thornburgh did not do this</p>	<p>ODFW March 1 – Letter</p>	<p>As noted above the standard ODFW wishes to create is not one supported by law. Applicant experts included a water lawyer, and qualified CWRE, who provided substantial evidence of past use of water rights. The modeling was done using the most up to date modeling tools available and deployed them using scientifically sound inputs as is describe in numerous technical reports and memos by RSI and Four Peaks.</p>
<p>Although applicants team used some of the best available tools, GSFlow and QUAL2Kw they should have assessed reasonably foreseeable future impacts and conditions, including streamflows required by the Habitat Conservation Plan and accounting for groundwater declines.</p>	<p>ODFW March 1 – Letter</p>	<p>While Thornburgh’s technical team deployed the best available tools the elements ODFW states that should be addressed are not reasonably foreseeable. To the contrary future impacts and conditions are highly subjective. For example, the evidence shows the Center for Biological Diversity filed an intent to challenge the HCP which would change future streamflows. Mr. Newton has stated the HCP is related to stored water, not live flow water. By contrast the 2022 FWMP and its mitigation is based on live flows.</p> <p>Accounting for groundwater declines would require a massive level of scientific insight that likely doesn’t exist anywhere in Oregon, not even the USGS or OWRD. Any estimation done regarding such would be highly subjective, would not be defensible, and would most certainly be attacked for being wrong. On the other hand, as the evidence shows, Thornburgh with its 20+ technical reports, which includes modeling numerous scenarios for ODFW, has provided more scientific analysis of impacts to fisheries than has been completed for all other resort projects combined. Still ODFW by their own admission has not fully reviewed the modeling provided to them. Lastly, these elements requested by ODFW were not requested of any other resort and are not required by the no net loss standard.</p>
<p>Analysis does not incorporate levels or bounds of uncertainty as requested by ODFW (wet, dry,</p>	<p>ODFW March 1 – Letter</p>	<p>This is not true. RSI provided a simulation of mean, 10% & 20% greater impacts, and 10% & 20% less impacts. They explained their use of the year 2016 as being an average year and why that was statistically relevant. Many comments faulted</p>

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average years) and range of past use of water rights		applicant for not modeling dry years, assuming that in a dry year the resorts impacts would be heightened. RSI explained the opposite is true. Given the 2022 FWMP largely results in benefits from increased flows and reduced temperatures when natural flows are reduced, such as in a dry year, the increased flow that Thornburgh provides are a greater % than those modeled resulting in a greater benefit than the results provided. ODFW provided no scientific evidence to the contrary.
ODFW continues to have concerns re localized impacts of groundwater pumping on springs.	ODFW March 1 – Letter	ODFW has been provided extensive and detailed scientific data on the impacts and benefits to springs using state of the art modeling tools prepared by experienced and educated scientists. By their own admission they have not analyzed the modeling results, so any concerns are not based in science or fact.
SUBSTANTIAL CHANGE		
Change of water permit is a substantial change (claimed as change in source of water); 2008 FWMP relied on G-17036 Loss of permanent supply of water is a substantial change	COLW	The source of water is the regional aquifer pumped from wells on the Resort property. The source of water is not being changed – only the permits that authorize pumping from that source. Per LUBA’s decision of LUBA 2021-066, “in calling for ‘updated documentation’ for each phase of development, the text of FMP Condition 10 suggests that water sources and permits for the destination resort could potentially change following FMP approval.” The evidence also shows that G-17036 is valid and non-cancelled.
The removal of a golf course is a substantial change.	COLW, etc.	The CMP decision makes it clear that the applicant is only required to build one golf course; the other two are optional. Agreeing not to build an optional course is not a substantial change.
2022 FWMP’s restriction on approved uses is a substantial change because economic analysis based on full development of Resort with three golf courses.	Bragar	This is not correct because the CMP decision does not require full development of the Resort with three golf courses. Further, the argument that “X” is a substantial change, or that Thornburgh needs to start over due to some change has been repeatedly raised by Ms. Gould and rejected.
Substantial change due to change in recreational amenities plan	Bragar	This is not a change. The recreational amenities plan approved by the CMP does not require that all listed recreational amenities be provided. Only one golf course is required to meet recreational amenity approval criteria.
Substantial change due to change in open space	Bragar	This is not a change because the construction of three golf courses is not required. Further the modification did not change the volume of open space. The approved tentative plans and Resort site plans show the approved open space and provide one golf course in the same general area where two where two courses were allowed.

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		Any change that did occur was a change in the developed area, moving from golf course development to native open space, which is positive.
Substantial change due to reduced water use that will allegedly require a new water system plan	Bragar	This is not correct. See above. No new water system plan is required because the FMP and water system plan does not commit the Resort to use all water it is allowed to pump.
Substantial change due to reduced area of golf course for irrigation with treated effluent will require a new sewer system plan; not enough land in south basin to irrigate with effluent	Bragar, Lambie	This is not correct. Mr. Lambie made this argument to the hearing officer who rejected it. The evidence shows that applicant will be able to properly dispose of its effluent. It offered one solution which is that it can provide additional irrigation on the approved golf course rather than on a second golf course. Mr. Lambie incorrectly stated this was a reference to additional water use and overwatering of the approved golf course. In fact, only 34.5 acres of golf course, landscaped or other irrigated land was determined by the sewer system plan to be used for irrigation with treated effluent. The Resort's approved development plans provide far more than 34.5 acres of land suitable for irrigation.
CMP and FMP Condition 1 require the applicant to file a new CMP application because the 2022 FWMP is a substantial change to the approved plan(s).	Bragar	This is not correct; the condition only requires a new land use application and not a new CMP or FMP. The Applicant has followed the correct process.
Approval of 2022 FWMP requires a change in findings of fact regarding Condition 10 which relied on G-17036 and specific water sources	Bragar	This is not correct and has been previously rejected. Condition 10 does not require specific reliance on G-17036. Further, G-17036 remains a valid and non-canceled water right. Obtaining additional water permits to authorize the same water use from the same source (regional aquifer on the Resort property) is not a substantial change. As found by LUBA, FMP Condition 10 suggests that water sources and permits for the resort may change after the FMP is approved.
JUNIPER REMOVAL		
Jeremy Giffin says removal of junipers will not replenish the aquifer	Bragar	Not relied on to achieve compliance of the FWMP with no net loss test.
Juniper removal plan not sufficiently specific BLM has not approved juniper removal	Bragar	This was not relied on to achieve compliance of the FWMP with no net loss test. That said the juniper removal has very detailed specificity as to location on BLM lands and the treatment plans to be undertaken. Those plans were developed jointly with the

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		BLM that where then accepted and approved in the Wildlife Mitigation Plan which was upheld by LUBA.
Irrelevant Miscellaneous Issues		
The applicant said it will over irrigate the golf course to handle a greater wastewater load; this will violate Water Management and Conservation Plan	Bragar	This is false. Mr. DeLashmutt was referring to the comment from Mr. Lambie that Thornburgh would not be able to dispose of effluent, stating that the Resort would irrigate with it; not overirrigate by using it. There is no violation of the Water Management and Conservation Plan that contemplates the use of treated effluent for irrigation purposes.
CMP Condition 27 requires approval of the FWMP by ODFW and BLM	COLW, Bragar March 1	CMP Condition 27 was replaced by CMP Condition 37 in the Board’s final CMP decision dated April 7, 2008. CMP Condition 27 allowed ODFW and BLM approval of the WMP (including FWMP) without public input. Condition 37 replaced Condition 27 with a requirement that a wildlife plan be developed by the applicant and filed with the County for public review.
Building permits are being issued without water	Bragar	The building permits that were issued were for the construction of the reservoir, pump station and well house, all elements that are required for fire suppression. Further Thornburgh can pump water under the Tree Farm Certificate.
Impacts to surrounding properties not adequately analyzed	Bragar	Impacts to surrounding properties were resolved with approval of the CMP and FMP. Further, any impacts that could occur are less with the 2022 FWMP and its pumping of 1,460 AF than the currently approved plan with its approved pumping of 2,129 AF. The changes to mitigation measures in the FWMP will have no discernible or significant impact on surrounding properties or on any other properties as impacts to waterways, while positive, are not measurable.
Affordable housing is a problem	Bragar	This has nothing to do with the no net loss standard.
2022 FWMP does not address warm pond water in Deep Canyon Creek	Bragar	The 2022 FWMP is not pumping water from the creek. The modeling done by Thornburgh experts that conclusively show compliance with the no net loss standard did not rely on any actions to be taken pertaining to the creek or pond water in Deep Canyon Creek.
Must require proof of “actual water” at time of tentative plan and site plan review – means issues left to building permit technicians.	Bragar	This is false and has been raised numerous times by Gould only to be rejected repeatedly by the courts. Further, it has nothing to do with this proceeding. This is not an application for a site plan or a tentative plan.

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Not clear what “during review of Resort land use applications means” – what is required during site plan and tentative plan review?	Bragar	The 2022 FWMP includes compliance and reporting responsibilities that must be followed and are further imposed by Condition 40. Site plan and tentative plans are land use applications that have public review requirements.
FWMP statement that certain provisions are not grounds for denial of a land use permit implies but does not state that other violations are grounds for denial and “could result in a lost development permit”	Bragar	Nothing in the FWMP suggests the loss of a development permit after it is approved.
Pulling water from outside the Deschutes Formation	Bragar	This is incorrect. There is no evidence of water coming from outside the Deschutes Formation Aquifer.
Thornburgh misrepresents findings at least 11 times	Bragar/Lambie	We disagree with this characterization. Thornburgh has provided robust analysis by numerous technical experts. Appellant’s arguments are often based upon false premises surrounding G-17036 or that an instream water right is the only way to provide legally protected flows. These are more properly misrepresentations than those of Thornburgh’s experts.
2022 FWMP does not comply with DCC 18.113.070(K), Water Availability because it does not have an approved source of water	COLW, Bragar et al	This is not correct. The source of Thornburgh’s water is and has always been the Deschutes Formation Aquifer (the regional aquifer). This source was approved in the CMP and has never changed. Further, Thornburgh has provided numerous permits, or certificates to extract water from that source, that are listed in the numerous tables and water rights charts, as well as the FWMP itself.
2022 FWMP does not comply with DCC 18.113.070 (P) that requires the Resort not to alter the character of the area and not impact their ability to obtain future use approvals	COLW	Nothing proposed will impact the character of the area or the ability of area property owners to obtain future land use permits.
Gould not foreclosed from making arguments re DCC 18.113.070(K) by recent court cases	Bragar	Water availability is settled. Determinations made by the courts and the County in previous land use proceedings are properly resolved against Gould and may be relied

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		upon during multi-stage or phase review. <i>Gould OLU</i> . Thornburgh has shown through substantial evidence that it has valid and non-cancelled water rights.
Temporary transfers are not sufficient to be available as required by DCC 18.113.070	Bragar	The availability of water is settled. Furthermore, the evidence shows that water is available, both as a matter of fact, and a matter of law.
CMP is void due to failure to initiate review on remand of CMP	Bragar	LUBA found that the FMP incorporated the requirements of the CMP; it is not void. The statute relied upon by Gould was implemented after the remand and cannot be applied against Thornburgh. Impermissible collateral attack on that decision and final CMP/FMP.
Use of three existing wells is expanded by 2023 revision of 2022 FWMP; causing noncompliance with no net loss standard	Bragar/Lambie	The evidence shows that there has been no pumping from any of these three wells, and further that they will not be used.
2023 provisions on temporary mitigation credits are inadequate	Bragar/Lambie	The FWMP does not require temporary mitigation credits to achieve compliance with the no net loss standard; it allows the current use of these credits to be discontinued.
Issue	Source	Response
FWMP lacks adequate and clear reporting requirements	Bragar/Hearings Officer	The reporting is clear and requires applicant to inform the county and ODFW of the status of the resort's impacts and benefits that parties can assess compliance with the no net loss standard. Applicant worked with ODFW to develop language that was acceptable to them. The language was based upon language in applicant's burden of proof that was footnoted and cited by the hearing officer. At the hearing, ODFW noted this language was acceptable.
Advance mitigation not creditable because achieved prior to impacts of pumping	Bragar – March 1 Lambie – February 23	The 2022 FWMP mitigates for the effects of Thornburgh's pumping completely without consideration of advance mitigation so that once advance benefits no longer exist, the FWMP will continue to meet the no net loss standard. Advance mitigation, however, is a fact. It will offer stream and river benefits in excess of Resort impacts for a significant period of time. The fact that this is a benefit to fisheries habitat is undeniable.

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<p>Compliance reporting improperly counts temporary mitigation credits as accumulating over time. They are only useful at the time of water use.</p>	<p>Bragar – March 1 Lambie – February 23</p>	<p>The reporting requires applicant to account for the benefits that it is providing and to show the impacts that it is creating. Doing so keeps an accurate accounting of the “net” loss or gain consistent with the definition of net. Opponents are likely opposed to the accounting method as will clearly shows overwhelming benefits being provided, particularly as those benefits are presently being provided, and in some cases already have been for a decade or more. Mr. Lambie notes that the benefits are temporal, i.e.: won’t last forever but expert evidence shows that the plan will continue to work if and when excess benefits are not provided. Ms. Bragar claims benefits are only useful when Thornburgh is using water. That is a silly argument. When fish are swimming in more and colder water that creates a benefit to their habitat. Artificially reducing the benefit to the level of the Resort water use impact would be an incorrect application of the no net loss test.</p>
<p>Improper to defer review of compliance with FWMP to OWRD to establish wet water</p>	<p>Bragar</p>	<p>The Applicant has demonstrated that its water is wet water. At the time of transfer or review of a mitigation measure, OWRD will again address this issue. OWRD is the state agency that oversees implementation of water law. There is nothing in DCC 18.113.070(d) that requires Deschutes County to assume that role. The 2022 FWMP does not defer review of compliance, compliance and reporting is part of the plan. Although OWRD is the body that must approve water rights transfers and Deschutes Basin Groundwater Mitigation measures, the 2022 FWMP still works it if the plan’s water rights are not pumped and, therefore, no action is required by OWRD to achieve compliance with the no net loss test.</p>
<p>Well impacts to surrounding property owners are not resolved</p>	<p>Bragar</p>	<p>Issue settled by approval of the CMP and FMP.</p>
<p>Holding a water certificate does not authorize pumping and offers no guarantees that the amount appropriated will be available for use or that use won’t injure a senior right or degrade the environment.</p>	<p>ODFW March 1 – Letter</p>	<p>The record shows no evidence of any live flow water right being regulated off or reduced due to a lack of flow or water. Mr. Newton differentiated live flow from storage water during the hearing noting that the irrigation districts that rely on stored water do in fact get reduced and partial allocations. That is not the case for live flow or groundwater. As for the groundwater rights, there is over 3 million AF of recharge with only roughly 50,000 AF of use, so the likelihood of a</p>

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		<p>groundwater right being regulated off, or not getting its water, is next to none. Additionally, ORS 537.270 is directly counter to ODFW’s argument. Thornburgh is entitled to rely upon water rights granted by OWRD unless and until they are subject to cancellation proceedings. None of the identified water rights are subject to cancellation proceedings.</p>
<p>2022 FWMP does not provide legal protection of cold, spring-fed water in close proximity to the point of impact as it did in the 2008 FWMP</p>	<p>ODFW March 1 – Letter</p>	<p>This is untrue. The technical analysis shows that groundwater discharges increase in virtually all reaches of the river, increasing the flows of cold spring water into the rivers and so ODFW’s argument is without merit. The point of contention is that ODFW wants to define what legal protection is or may be used, which is only a legally protected instream water right (ISWR). The evidence shows that this is but one method of mitigation and that water law provides multiple other methods which accomplish the same result under the Deschutes Basin plan. ODFW disregards other methods the evidence shows are protected, ie: Cancellation in lieu of mitigation, or “Offset and Voluntary Cancellation Option” as noted by Mr. Lambie. Whatever other options are called, an ISWR is not the only method. ODFW is wrong on the law and the facts. Additionally, ODFW has previously found that the nonuse of water rights in one location and their use elsewhere and the nonuse of water rights without permanent instream protection under the OWRD mitigation program provides mitigation of fish habitat impact of a resort’s water use for purposes of the no net loss test and we agree.</p>
<p>Thornburgh has failed to demonstrate the “reliability” of its water rights Tree Farm and Dutch Pacific water rights do not have regular past use LeBeau has partial use only so “inconclusive” None of these rights are certain to achieve no net loss to the system and no potential impacts to the resource</p>	<p>ODFW March 1 - Letter ODFW January 31</p>	<p>We disagree. Thornburgh’s water lawyers have addressed this issue, at length, with ODFW and the dispute is, generally, that ODFW will not accept evidence of reliability even if it is evidence that would be or been accepted by OWRD to demonstrate the reliability of Thornburgh’s water rights. OWRD and not ODFW is the arbiter of water law. Additionally, ORS 537.270 is relevant and dispositive to ODFW’s arguments. ODFW is also wrong to the extent they argue that any particular right must be able to show no net loss in isolation.</p> <p>The Tree Farm water right has been extensively litigated, including having OWRD recently issue a final transfer order in a different</p>

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		<p>proceeding. That order is in this record. No party has argued that the conclusions of fact or law in that order are incorrect. This establishes that the Tree Farm right is valid and may be relied upon.</p> <p>Similarly, Jim Newton specifically provided additional information and analysis on the LeBeau right, including aerial evidence of use, that demonstrates that it is a reliable water right.</p> <p>With regards to Dutch Pacific, benefits accrue even if that right is cancelled. There is a pending application regarding this right. Regardless, Thornburgh has ceased pumping water under that right to accrue benefits to Whychus Creek.</p>
Cancellation or transfer of water rights provides no legal protection to instream flow	ODFW March 1 – Letter	ODFW is not correct. Mr. Newton, CWRE and Mr. Lambie, CWRE have both stated that cancellation is an acceptable and approved form of mitigation and as such legally protects the water instream. ODFW staff are not experts in water law or in the OWRD mitigation program so their opinion should be regarded as just that, a lay opinion. ODFW’s issue is that they only want to accept a single method of protecting in stream flows whereas the law provides for additional measures.
Monitoring is fundamental in meeting the legal test	ODFW March 1 – Letter	This is not correct and is not required by DCC 18.113.070(D). The 2022 FWMP provides for compliance and reporting, which is all that is required. Furthermore, it is not possible to monitor changes in flow and temperatures because the changes are not measurable.
Jim Newton is wrong that cancellation of a water right will provide the same benefits as an instream water right	Bragar March 8	Both Mr. Newton and Mr. Lambie (Gould’s asserted expert) stated cancellation is an acceptable form of mitigation under the OWRD mitigation rules.
The plan does not work because it allows the applicant a choice of mitigation/actions; some of which don’t work (cancellation) and that do not guarantee an outcome; water will not be moved instream	Bragar March 8	As is noted repeatedly by Mr. Newton, each of the methods, i.e.: cancellation, transfer to Thornburgh or transfer to an instream right with mitigation credits all provide mitigation as was modeled in the GSFlow and QUAL2Kw models. The evidence by Mr. Lambie regarding cancellation supports this. Further, water does not need to be moved instream by an instream water rights transfer to provide no net loss mitigation, the standard does not prescribe any particular method to achieve the result. As Mr. Newton states, the cessation of pumping of

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		<p>the groundwater rights provides mitigation as of the moment pumping has stopped. As is described herein and in the record, Thornburgh has been providing NNL mitigation for years already.</p> <p>Simply put, Thornburgh has modeled all variables and shown that the plan results in no net loss.</p>
Newton's reference to the LeBeau right as obtained for in stream transfer is not supported by the proposed FWMP	Bragar March 8	The FWMP states the LeBeau water has a pending transfer. In the alternative the FWMP states it could be canceled in lieu, OWRD's Offset and Voluntary Cancellation Option as noted by Mr. Lambie. In 2021 Thornburgh leased this water instream to provide benefits to fisheries habitat. The same benefits will be provided by compliance with the 2022 FWMP.
<p>Mr. DeLashmutt is telling the BOCC one thing and OWRD another re which wells the Resort intends to use to pump water</p> <p>Mr. DeLashmutt claims he has not used the three wells the 2008 FWMP required him to abandon but prior applications for water rights transfers proposed to use one of the three wells.</p>	Bragar March 8 Anuta March 8	<p>Thornburgh studied the impacts of pumping water on its property in a number of different locations so that any change to the number of wells and locations allowed by the FMP and OWRD will not undermine the efficacy of the 2022 FWMP.</p> <p>That said, OWRD applications made in the past listed one of the exempt wells that could be used to pump water under the permit being transferred. That water, had it been used, would not have been exempt water but would be limited to the restrictions of that particular permit. Still, that well has not been used for years and will not be used. Since the time of the OWRD application, the Applicant determined the well will not be used for any purpose. Gould's arguments are taken out of context and misleading.</p>
Thornburgh is not telling the truth about its pond; it will be stocked with fish that will prey on amphibians according to the Thornburgh website	Bragar March 8	That is false. The website shows the main lake that is connected to a smaller lake via a stream which is consistent with the site plan approval for the lakes. At the time the website was developed it was planned that stream and lower lake would have fish in them (there was not a connection between the lakes). As part of this application to reduce our water usage Thornburgh reduced some of the lake area and any thought of stocking the smaller lake was eliminated. This is a non-issue.

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<p>S. Hart filed e-mail from K. Gorman that addresses the current status of OWRD applications; Thornburgh has no approved consumptive water rights</p>	<p>Bragar March 8 (Part 3)</p>	<p>While the email from Mr. Gorman did address a list of different permits and actions it did not reach the conclusion noted by Ms. Bragar or Ms. Hart.</p>
<p>The filing of information by the applicant less than 20 days before the hearing violates ORS 197.797 (3) that describes notice requirements for land use applications</p>	<p>Bragar March 8</p>	<p>This is not correct. That statute does not preclude an applicant from providing additional evidence to respond to issues, arguments, evidence, or other claims related to its application. Thornburgh provided an updated FWMP which contained generally the same measures and mitigation as originally contemplated by the Application and burden of proof. Ms. Gould was granted a <i>de novo</i> hearing on all issues, which necessarily allows issues and evidence to be filed by all parties. Applicant’s request has not varied and the same criteria apply as to the original application. In any event, Ms. Gould and others had a 4-week open record period and a one week rebuttal period to respond to issues and so were not prejudiced.</p>
<p>Crooked River mitigation fund is unclear, uncertain and cannot support a finding of compliance with the no net loss test</p>	<p>Bragar March 8</p>	<p>Thornburgh did not rely on the Crooked River mitigation fund to achieve compliance with the no net loss test. It provided this fund to provide benefits over and above those required to meet the no net loss test.</p>
<p>The Resort has a right to modify its project to limit water consumption without modifying the FWMP so should not be able to count the reduction in water use to meet the no net loss standard.</p>	<p>Bragar March 8</p>	<p>This argument lacks merit. Reducing water consumption by 35% drastically reduces the impacts that result from that lowered consumption. It is natural that this reduction be factored into the analysis and modeling to determine compliance with the no net loss standard.</p>
<p>ODFW is looking at whether there is “wet water” and Ms. Howard’s e-mail does not address that issue and shows the Tree Farm water right was not regularly and consistently used. That means a transfer will result in a net loss. Tree Farm water is “paper water.”</p>	<p>Anuta March 8</p>	<p>Mr. Anuta’s conclusions are false. The fact that water rights may not be pumped regularly in the past does not alter their ability to be used each and every year in the future and in the same manner as the rights may be used by Thornburgh – when Thornburgh pumps water and when mitigation is needed. As noted by John Lambie, mitigation is not needed now. Furthermore, it is clear that the Tree Farm water is not “paper water” – water rights that do not allow the holder to actually pump water from the ground. Also Mr. Anuta’s opinion is just that. He is not a technical expert, and his testimony on the no net loss should be viewed as simply his opinion. Moreover, a different portion of the Tree</p>

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		Farm right just a received final permanent transfer order that disputes this. That order is in the record.
Gould filed a lawsuit that stayed use of the temporary transfer of Tree Farm water rights ORS 536.075	Anuta March 8	OWRD has determined the stay Ms. Gould was hoping to obtain is not available in this particular type of case, it only applies in enforcement cases. The water may be used now.
Cancelled water rights do not equal mitigation	Anuta March 8	That is false. Mr. Anuta does not understand OWRD rules. He should review Mr. Lambie’s discussion on the subject, discussed above, which agrees with Thornburgh that cancellation is an OWRD-permitted mitigation measure.
The FWMP does not require the use of the Tree Farm right for mitigation	Anuta March 8	The 2022 FWMP states that the Tree Farm right will be transferred to wells at Thornburgh (which has already been approved on a temporary transfer basis). A transfer doesn’t require mitigation like a new permit would. Not pumping the Tree Farm water right where it was authorized assures that it will not draw water from the regional aquifer in that location – regardless of what action is taken by OWRD. This allows it to enter the surface water system where it will benefit fish and aquatic species in that system to balance Thornburgh impacts. The robust technical analysis provided by Thornburgh shows this provides benefits that mitigates for Thornburgh’s overall impacts and helps achieve compliance with the no net loss standard.
OWRD cancellation rules do not apply to the transfer of existing groundwater rights	Anuta March 8	The applicant is not claiming the cancellation rules apply to transfers. The transfer section(s) applies to transfers. Existing groundwater rights may be cancelled as stated by Mr. Lambie and Mr. Newton.
Plan does not commit Thornburgh to instream transfer of Deep Canyon Creek water referenced by Jim Newton in his first response to testimony on Deep Canyon Creek Springs and this conflicts with the FWMP	Anuta March 8	Mr. Anuta is confused. As is noted in the FWMP and in evidence submitted by Mr. Newton (as well as opponents), Thornburgh has a pending application for transfer of the Deep Canyon water to wells at the resort. In the alternative, applicant can cancel the rights in-lieu of mitigation or can transfer it instream to obtain mitigation credits used for G-17036 or other permits that are pending. The evidence shows all those methods will provide benefits that meet the no net loss standard.
Issue is whether there is 5.5 CFS of flow in Deep Canyon Creek as promised by 2008 FWMP. This is covered.	Anuta March 8	This is a requirement of the 2008 FWMP. It is no longer applicable. It was not relied on to demonstrate compliance of the 2022 FWMP with the no net loss/degradation test. Furthermore, the 5.5 CFS of flow was required to mitigate a water use that is over one and a half times

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		greater than proposed by the 2022 FWMP. Lastly, the 5.5 CFS reference was not a “requirement” but an anticipated benefit of that plan.
Options in 2022 FWMP mean it does not assure compliance with no net loss; cancellation and nonuse of surface water will not actually produce wet water.	Anuta March 8	This is incorrect. As Mr. Newton has testified each of the three methods provide equal benefits to the fisheries habitat. Mr. Anuta’s confusion over cancellation has been responded to numerous times. As noted before Mr. Newton and even Mr. Lambie himself have discredited Mr. Anuta’s erroneous claim. Mr. Anuta’s claim that the cessation of pumping will not result in wet water highlights the lack of understanding of the hydrology of the basin. Pumping groundwater reduces wet water. Stopping pumping increases wet water.
There is no instream water right for groundwater, so it is not protected instream. Must have an instream right to claim surface mitigation flows.	Anuta March 8	Mr. Anuta is confused. Applicant has not claimed there is an instream water right for groundwater. What applicant has stated, is that when you stop pumping a groundwater right that water is left in the aquifer that flows to a point of discharge where it is discharged into the stream. Leaving water in the aquifer puts that water instream; this is not disputed.
Newton is wrong re the status of water rights transfers; only one has been approved. It is not approved for mitigation; it is approved for consumption.	Anuta March 8	<p>The transfer of the point of appropriation of the Tree Farm water right has been proven to provide “wet water” that Thornburgh can pump from the ground. As Mr. Lambie stated, changing the POA changes the location and timing of the impacts. The change of the point of impacts resulting from the change of POA has been modeled extensively, which shows that leaving the transfer water in one set of locations and moving it to Thornburgh wells results in increases in streamflow reduce temperatures and improve fish habitat. This is mitigation for Thornburgh’s impacts because it results in increased habitat benefits.</p> <p>The County and ODFW approved Eagle Crest’s mitigation plan that does the same thing – obtain credit for changing the point of appropriation of water such that water is placed instream in river stretches where it would not otherwise flow. These rights were considered instream mitigation right although not “legally protected instream rights.” Paradoxically, opponent Gould has made it clear that she will oppose any effort to transfer water rights permanently instream.</p>

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<p>Thornburgh is using water for construction from a test well which violates the 2008 FWMP which requires mitigation be in place before Resort water use commences.</p>	<p>Anuta March 8</p>	<p>Thornburgh has been providing mitigation in the form of DRC credits, a source of mitigation specifically authorized by the CMP since 2013. It is not correct that water use is occurring prior to mitigation. Furthermore, mitigation was required once pumping under a groundwater permit began – not pumping of water from an exempt use allowed to occur by the FWMP.</p>
<p>No water is currently available to permanently operate the Resort</p>	<p>Anuta March 8</p>	<p>This is false. The evidence shows that the Tree Farm transfer is approved and can provide water. Permit G-17036 is valid and can provide water up to the level of mitigation that is provided.</p>
<p>The water supply plan puts no net water into the interconnected groundwater and surface water hydrology of the Upper Deschutes Basin</p>	<p>Lambie March 8</p>	<p>This is incorrect. The TSID mitigation water puts a significant amount of wet water into Whychus Creek and has done so for roughly a decade. The cessation of pumping from the Dutch Pacific, BFR and Tree Farm wells are placing water into the basin and in some instances, have been doing do so for years. Thornburgh has provided substantial technical analysis that is contrary to and more persuasive than Mr. Lambie’s claims.</p>
<p>Eilers says GSFLOW Model is linked to the QUAL2Kw model but it is not a linked, coupled or integrated model; it is a stand-alone surface water quality modeling code. It does not quantify increases or decreases in flow as Eilers infers. That information is supplied by the modeler as inputs. It is not an integrated hydrogeologic model like GSFLOW. Therefore, claim that reaches are increasing in flow is unsupported by the scientific method used in QUAL2Kw.</p>	<p>Lambie March 8</p>	<p>The GSFlow modeling was completed to analyze the effects to surface water from pumping groundwater at Thornburgh coupled with the cessation of use of the transfer wells. The results of that modeling was exported into (or linked to) the QUAL2Kw program so that RSI could determine the thermal impacts of the changes in flows. Both the GSFlow and the QULA2Kw modeling show increases in groundwater flows. Table 1 in the Thornburgh submittal of March 8 shows the results of the GSFlow modeling indicating increased in groundwater flow from the 2022 FWMP across all reaches except for the Crooked River.</p>
<p>Eilers in BOCC-8 misstates the findings of the GSFLOW model; that Thornburgh model relocates extractions of water rights via transfers and simulates decreased in flow based upon only a 14-year dynamic</p>	<p>Lambie March 8</p>	<p>The modeling is a conservative representation of groundwater usage. It simulates full resort pumping and immediate impacts to groundwater and surface water flows that will occur when a steady state condition occurs but the impacts will not, in fact, occur at the level modeled for approximately 30 years.</p>

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simulation period for water exchange and not a steady state exchange condition.		
Eilers claims a benefit to frog habitat in the Little Deschutes but Thornburgh extraction will decrease zones of surface water flow accretion particularly along stream banks around Deep Canyon Creek to Whychus Creek that provide riparian corridors for spotted frogs.	Lambie March 8	Mr. Eilers, a Certified Fisheries Biologist documents a benefit to the Spotted Frog in the area where habitat is threatened. Mr. Lambie provides no scientific basis for the claims he makes regarding the spotted frog. Furthermore, Mr. Lambie is geologist and CWRE, neither of which provide expertise on the spotted frog or any aquatic habitat.
No modeling done for the Crooked River but Eilers claims immeasurable impacts there.	Lambie March 8	Mr. Lambie is not correct. Extensive modeling was done on the Crooked River. First Four Peaks performed the GSFlow modeling, with the results included in their initial report, among others. These results were exported and linked to the QUAL2Kw model so that RSI could model the impacts to the Crooked River. All reductions in flow to the CR simulated with QUAL2Kw were linked to the upstream cell (at Osbourne Canyon) to simulate the maximum possible impact to the lower reach of the CR.
RSI BOCC-9 is deeply flawed. It does not document how decreases in flow to the Crooked River were introduced to the GSFLOW model. The GSFLOW looks at a 14 year horizon but impacts would continue to increase over time. This is not a steady state condition but the model will treat it as such.	Lambie March 8	As noted above, the reductions in groundwater to the Crooked River were assumed to occur in the cell representing Osborne Canyon to represent the greatest impact on the reach possible. USGS used the same assumptions in modeling groundwater flow in the basin. We support the use of their approach by the Applicant for this particular analysis.
BOCC-9 attempts to find a linear relationship for the change in the river water temperature data at Osborne Canyon to Opal Springs. There is no technical basis for a linear relationship between these two measurement points. The actual profile measured by infrared in 2006 by Watershed Sciences is in Figure 5 of BOCC-9. The relationship is non-linear.	Lambie March 8	The Osborne Canyon monitoring site lacked temperature data corresponding to the 2016 data at the Opal Spring site. It was necessary to generate reasonable water temperatures for the site to forecast temperature responses in the lower reach. Developing a regression equation from between Opal Springs and Osborne Canyon is a reasonable and scientifically defensible approach to generate the input temperatures. This is because temperatures at Opal Springs are related to the temperature of water at the beginning of the reach.

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<p>The fit of the model used by RSI in BOCC-9 is a weak one.</p>	<p>Lambie March 8</p>	<p>The fit is a reasonable approximation of river temperatures at Osborne Canyon and compare reasonably well with temperature data collected from 2003-2006.</p>
<p>Improper to compare 2004 river temperatures (Osborne Canyon) against 2016 river temperatures (Opal Springs). There is no contemporaneous data set between flow and temperature underpinning RSI's QUAL2Kw estimates.</p>	<p>Lambie March 8</p>	<p>Having missing data is not unusual in conducting environmental work. Dr. Vache made a professional judgment that is reasonable and routine.</p>
<p>QUAL2Kw does not generate a groundwater to surface water discharge relationship within the simulation. The user supplies those values. There is no documentation of where RSI placed the flow deprivations into their model.</p>	<p>Lambie March 8</p>	<p>The model fits are limited by the availability of flow and river temperature data. However, in virtually all sites, the absolute mean error (AME) for temperature is less than the recommended target of 1.0 C as recommended by the model developers.</p>
<p>Removal of .65 cfs (RSI's flow reduction) of cooler groundwater in summer month cannot produce a temperature increase relative to a simulation in which 0.65 cfs is not removed. This is not a credible outcome.</p>	<p>Lambie March 8</p>	<p>The reason for the model outcome is that the decrease in flow to the Crooked River was assigned at Osborne Canyon. Although the groundwater loss is cold water, the reduction in flows has a counter-intuitive result because there is less water (of any temperature) proceeding towards Opal Springs. Consequently, the spring input further downstream has a greater impact on decreasing river temperature than if the reduction in flow was distributed closer to Opal Springs. Regardless, these changes are imperceptibly small and scientifically irrelevant; which is the main point.</p>
<p>BOCC-10 is an evaluation of other models to make inferences about habitat impacts; it does not add water but looks to models of transfers based on incomplete modeling simulations.</p>	<p>Lambie March 8</p>	<p>Correct, QUAL2Kw does not generate a groundwater to surface discharge relationship. GSFlow output (cell showing increasing/decreasing groundwater flows) were prepared by Dr. Munganthan and provide a close approximation of the values used in calibrating the QUAL2Kw model flows.</p>
<p>BOCC-10 contains misrepresentations. Report selected 19 locations on four water bodies then averaged for each of the water bodies. Fish habitats as averages is a</p>	<p>Lambie March 8</p>	<p>Mr. Lambie is not qualified to offer a professional opinion regarding fish habitat. He is not a fish biologist. <i>See, LandWatch Lane County v. Lane County</i>, 80 Or LUBA 205 (2019).</p>

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questionable concept. One should assess the habitat at each location.		Dr. Caldwell did assess the impacts to fisheries based on individual sites and not on an average of sites as incorrectly claimed by Mr. Lambie. Dr. Caldwell is a credible, expert fish biologist.
BOCC-10 Section 2.5 misstates that impacts of water use were evaluated at a steady state (14 years is not steady state). This minimizes the impacts of pumping.	Lambie March 8	As noted throughout the technical evidence, flows are increased throughout most effected reaches. This was derived from assessing the benefits provided (which increase over time) minus the impacts created (which increase over time in relation).
BOCC-10 Section 2.5 p. 8 assumes live flow and says mitigation has commenced but no mitigation has commenced. TSID water is not mitigation until conserved water is permanently transferred to OWRD and all other transfers remain incomplete. This is a misrepresentation.	Lambie March 8	Mr. Lambie is incorrect. Mitigation has commenced on numerous fronts. Final orders were signed on the TSID conserved water in 2009. DRC mitigation credits have been in place since 2013. The LeBeau water was leased instream in 2021. These rights all provide live flow. In addition to that pumping has stopped on the Dutch Pacific well in 2019, the Tree Farm well in 2020, the BFR-1 well in 2021, and the BFR-2 well in 2022. Water is currently being left in stream that could otherwise be pumped under one or more of the water rights purchased by Thornburgh. This provides actual mitigation. A transfer of the water right to OWRD is not required to provide a benefit to waterways and habitat. Further, Mr. Lambie’s review and his claims of misrepresentation” show that he has provided an advocacy document rather than an unbiased, scientific analysis.
BOCC-10 does not provide documentation of outputs. QUAL2Kw models are not properly documented as to what flow regime changes to show what flow regime changes it is aware of based on groundwater extraction.	Lambie March 8	The model outputs were provided in sufficient detail to allow for a reasonable review of methods and results. The model was available for others to examine in greater detail upon request.
The October 2022 study makes reference to 2008 Steady State Modeling by Yinger that is out of date. It looked at effects of use of G-17036 as a source of water; this was not done in the GSFLOW study.	Lambie March 8	The original plan looked at the results of the 2008 Yinger report that was relied on extensively by Ms. Gould and the hearing officer (as well as courts, etc..) during the 2008-2015 proceedings. The original study assumed then, as always, the source of the water to be groundwater pumped from wells at the resort. The permit or certificate number would have no bearing on the impacts. At that time Thornburgh had not completed more up to date modeling. Based on the comments

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		received, largely those by ODFW, Thornburgh retained Four Peaks to complete the full GSFlow modeling using the most up to date information available to accurately assess the real impacts and benefits.
Need a model of transfers for a period long enough to demonstrate that stream flow depletions have reached a maximum.	Lambie March 8	The models show that streamflows are increased as a result of the 2022 FWMP. The model study period was acceptable to ODFW and provides a scientifically reliable tool to assess impacts and benefits. .
QUAL2Kw work done after GSFLOW analysis assumed mitigative flows from LeBeau transfer but no instream transfer is proposed.	Lambie March 8	An instream transfer is not required to provide mitigative flows in area rivers. This fact was recognized by ODFW when it approved the Eagle Crest mitigation without requiring an instream transfer. Also, this water was leased in stream in 2021 and there is a transfer application pending now to move the water to the resort's wells. In addition, the FWMP states the water right could be cancelled in lieu or transferred instream for mitigation credits and even if not approved this water has been adds water to the river now and as shown by the fact it was leased instream in 2021.
BOCC-10 appears to have been based upon an incomplete analysis done using QUAL2Kw in October 2022 predicated on older modeling of groundwater flow.	Lambie March 8	QUAL2Kw runs were conducted based on Yinger (2008) groundwater assumptions and later using the GSFlow model based on USGS (2017) model flows. The impacts to river flow and temperature did not differ greatly from one another with the exception of the USGS (2017) model indicating a greater reduction in flow to the Crooked River compared to the earlier groundwater model.
The four sites on the Crooked River model lack credibility. It is physically impossible to remove .65 cfs of cold groundwater discharge to warmer surface water in summer and generate a colder river flow outcome.	Lambie March 8	First, the four sites on the Crooked River were selected by ODFW and modeled by four Peaks and RSI. While we understand how Mr. Lambie could think the results are not correct, particularly as he is likely only looking at results and not the whole picture. Still he is not correct. As the evidence shows the temperatures of groundwater discharge as collected by OWRD in 2018 (See Ex. 6, OWRD Crooked River Spring Temps), in areas of the Crooked River are as high as 14.5 degrees C, much warmer than the spring discharges typical in the Deschutes River and Whychus Creek. Further the .65 is not constant but an average. The actual discharge, like the actual river flows themselves vary, at times substantially. The modeling uses that actual data points and in doing so, given the warm temps of the spring flows results in areas and times that show a reduction in temperatures from a reduction in

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		<p>discharge. Even so it is important to realize those results are a homogenous mix of a point in time (an average of sorts), while there will be cells that will show slightly difference thermal results. In any case the results are so small as to be below the ability of current instrumentation to measure them, and are what ODFW refers to as Noise.</p> <p>Additionally, it is not impossible for this result to occur. It depends on where the groundwater is withdrawn from that affects the outcome at Opal Springs. While the results are counter-intuitive, the model is consistent in showing virtually no change at Opal Springs.</p>
BOCC-24 DeLashmutt 3/1/2023 letter fails to disclose the BFR water rights are eliminated from the 2008 FWMP because they are being transferred and that they were modeled. The modeling shows new and different impacts not mitigated in the 2022 FWMP (likely Crooked River).	Lambie March 8	The 2022 FWMP is very clear that a transfer application is pending. Further, Mr. Lambie assumes that each and every point of impact must be fully mitigated. This is not what was required in 2008 and is not what is required to meet the no net loss test. This test looks to the entire river system to assess overall impacts of Resort water use and mitigation measures.
Mr. Eilers states that the reach of Osborne Canyon to Opal Springs will experience minor decreases in discharge so Mr. DeLashmutt cannot say that modeling shows compliance with the no net loss standard.	Lambie March 8	Mr. Lambie does not understand the no net loss test. A biologically insignificant, immeasurable decrease in discharge in this one location is so small as to result in no loss or degradation of fish habitat in this location and insufficient to offset the balance of benefits elsewhere in the river system. As noted above, ODFW has referred to these minor decreases as Noise. Lastly, the Comprehensive Summary of Fish Habitat Effects analyzed the overall effects of Thornburgh’s plans (pumping and transfer/mitigation) and found that the 2022 FWMP will provide a net benefit to habitat quantity and quality.
No scientific evidence to support assertion in BOCC-15 at item 8 that the 2023 FWMP has mitigation water to support the proposed actions – should be required to file purchase transactions in the record.	Lambie March 8	The evidence provided by the applicant that it has purchased the water rights described in the 2022 FWMP is substantial evidence that supports a finding that Thornburgh presently holds these water rights. Mr. Lambie has provided no reason to doubt the verity of this claim. The record of the transfer applications and the extensive evidence by project opponents addressing those transfer applications demonstrates that Thornburgh has numerous water rights it is seeking to transfer.

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<p>There are not 106 AF of TSID water for mitigation credit</p>	<p>Lambie March 8</p>	<p>Thornburgh is not seeking mitigation credits from OWRD for TSID mitigation. Instead, it provided this water because it was required by the 2008 FWMP. This requirement of the 2008 FWMP is not modified by the 2022 FWMP. Its benefits to streamflows and temperatures in Whychus Creek have been quantified by Thornburgh and accepted by LUBA. Its effectiveness as mitigation for impacts to Whychus Creek and the cold water refugia provided in Lower Whychus Creek has been settled by prior appeals and decisions by LUBA.</p>
<p>TSID mitigation has the characteristic of benefiting Whychus Creek only and not reaches downstream, for example CW-103.</p>	<p>Lambie March 8</p>	<p>Whychus Creek is a tributary of the Deschutes River. The 1.51 cfs of water that is left in Whychus Creek flows downstream to benefit Whychus Creek from the increase flows and then into the Deschutes River where it will also benefit the river from the increased flow.</p>
<p>Third FWMP is substantively different than FWMP before hearings officer.</p>	<p>Lambie February 23</p>	<p>The hearings officer found that the 2nd FWMP was substantively similar to the 1st FWMP. Due to concerns raised by the Hearings Officer regarding clarity, Thornburgh returned to using the 1st FWMP and added information that the hearings officer found should be in the plan – all of which was provided in the burden of proof and in documents filed to support approval of the FWMP. There are no substantive differences in the mitigation plan itself.</p>
<p>Third FWMP contains new concepts of mitigation water and provisions not found in two earlier versions of the plan.</p>	<p>Lambie February 23</p>	<p>The third version of the FWMP does not include new concepts of mitigation water. New provisions relate to enforcement of the plan as required by the hearings officer and requested by other parties.</p>
<p>2023 FWMP lacks clear, concise and objective compliance standards to assure the 2022 FWMP will secure the water rights represented</p>	<p>Lambie February 23</p>	<p>Thornburgh has secured, by purchase, all of the water rights described in the 2022 FWMP. They will not be pumped regardless of the outcome of ODFW transfers or other actions. If a transfer is not approved, the mitigation water created by the cessation of pumping the water right will still provide actual benefits to groundwater and streamflow. That is what is needed to meet the no net loss test.</p>
<p>ODFW rules require a net benefit for habitat quantity and quality; something in excess of no net loss.</p>	<p>Lambie February 23</p>	<p>These ODFW rules do not apply in this proceeding. Furthermore, the modeling provided by Thornburgh demonstrates a net benefit for habitat quality (temperature) and quantity.</p>
<p>To meet no net loss, Thornburgh must go further than limiting groundwater pumping.</p>	<p>Lambie February 23</p>	<p>Thornburgh’s FWMP does much more than limit the amount of groundwater pumped by the Resort; it has reduced the amount of pumping, and it requires that Thornburgh not pump water rights that</p>

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		allow pumping in other locations in Deschutes County that result in increases in streamflow throughout the Deschutes Basin which includes the Crooked River, and it has restored 1.51 cfs of cool surface water in Whychus Creek.
Thornburgh acknowledges for the first time that moving the point of appropriation of water rights may impact different river stretches.	Lambie February 23	This is not a new idea – it is implicit in prior plans and in expert analysis of impacts provided by Thornburgh of all substantially similar versions of its 2022 FWMP. What is relevant is that the extensive analysis done shows that the 2022 FWMP in its entirety exceeds the no net loss standard.
Thornburgh has not identified mitigation for the impacts it found when analyzing its own proposed water supply actions.	Lambie February 23	Thornburgh’s analysis considers both the impacts of its own water use and the benefits of discontinuing water use of specific water rights it owns elsewhere.
Surface water transfers (Little Deschutes and BFR) will change zones of impact for aquatic habitat, especially the Crooked River	Lambie February 23	The effect of these transfers (and/or cessation of pumping) has been shown to offer positive impacts for aquatic habitat in areas impacted by Thornburgh’s consumptive use of water.
Thornburgh does not identify concrete actions and commitments to mitigate for aquatic habitat needs.	Lambie February 23	This is not correct. Mr. Lambie has noted the question is one of the location and timing of impacts. The 2022 FWMP commits the applicant to refrain from pumping specified water rights and Thornburgh’s experts have assessed the efficacy of that action in mitigating for the results of pumping groundwater for use by the Resort.
Thornburgh must prove “wet water” – BFR Deep Canyon rights are for 5.5 cfs but the record reflects that 5.5 cfs no longer flows in that location such that Deep Canyon rights are paper water.	Lambie February 23	Thornburgh provided 22 years of well logs on the BFR water that ODFW accepted. Mr. Lambie’s (and Mr. Anuta’s) claim regarding 5.5 cfs has nothing to do with this 2022 FWMP. The total amount of water consumed by the resort is less than that and the portion from the BFR rights a fraction of the resort’s use. OWRD approved a transfer of the BFR Deep Canyon rights to wells at BFR in 2018. If they were paper water, OWRD would not have approved the transfer. Further they have been used constantly and consistently for decades.
Cascade Geoengineering analysis of use of BFR water as mitigation claims compliance with no net loss whereas Four Peaks found moving extraction from BFR to Thornburgh resulted in identifiable impacts to the	Lambie February 23	As noted in the FWMP and throughout the proceedings the BFR water will either be transferred to the resort wells, cancelled in lieu, or transferred instream in exchange for mitigation credits. Any of these methods result in the same impacts/benefits. The impacts to the Crooked River are dealt with extensively in other areas of this chart.

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<p>Crooked River that grow over time. Can't rely on OWRD mitigation to meet no net loss.</p>		<p>The FWMP does not rely on OWRD mitigation to meet the net loss as applicant has provided extensive modeling showing compliance.</p>
<p>Without a defined source of water for the missing water supply (243 AC/FT/year), OWRD mitigation is unlikely to meet the no net loss test.</p>		<p>The modeling showing compliance was done utilizing 1317 AF of water, including the BFR, Tree Farm, Dutch Pacific, and TSID to offset the impacts of the pumping of the 1,460 AF. The modeling and analysis shows conclusively that this complies with the no net loss standard. The remaining water, if needed must come from BFR, COID (both previously approved sources) or other sources that provide flows to the lower Crooked River or the middle Deschutes River. In the event that additional mitigation water provides flows in other areas the applicant has agreed to an amended condition 40 that would require applicant to show compliance with the no net loss standard during a third stage development review.</p>
<p>No mitigation is provided in the Crooked River, but impacts are shown to occur there that must be mitigated.</p>	<p>Lambie February 23</p>	<p>This is not correct. The evidence shows that the cessation of pumping groundwater from transfer wells increases the flow of groundwater to the Crooked River, in an amount of more than 1 cfs. The primary premise of Mr. Lambie's claim is false.</p>
<p>A new FWMP must mitigate for new impacts from the Resort's new plans for water supply.</p>	<p>Lambie February 23</p>	<p>The Resort has no new plans for its water supply. It is agreeing to reduce its water use but is still obtaining water from the regional aquifer from wells on the Thornburgh property. It is only requesting approval to rely on additional water rights to allow water to be pumped at the Resort. The extensive modeling conducted by Thornburgh's experts shows the 2022 FWMP exceeds what is needed to meet the no net loss standard.</p>
<p>Thornburgh has reversed its 2008 commitment to remove three exempt wells; a measure required by FMP Condition 38</p>	<p>Lambie February 23</p>	<p>The wells have not been used, and it is agreed they will not be used.</p>
<p>Groundwater is declining in spite of Groundwater Mitigation Program</p>	<p>Lambie February 23</p>	<p>The groundwater mitigation program was not designed to restore groundwater levels. Rather it was implemented to restore surface water levels, which it has been shown to accomplish. Further, overall</p>

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		declines are not required to be mitigated by Thornburgh; Thornburgh must show its plan works to mitigate for its impacts and has done so.
Compliance Program is not clear. Item 1A that requires compliance with the 2022 FWMP for groundwater appropriation is unclear. The commitment to discontinue use does not make sense in relationship to groundwater rights that may be authorized by Application G-19139.	Lambie February 23	It is unclear what is referred to as Item 1A. The commitment to discontinue use is in effect while the various transfer and cancellation applications are processing. Application G-19139 is pending and will likely be adjusted pending the outcome of the various applications as noted in the FWMP. Nothing prevents the applicant from discontinuing the use of certain water rights to meet the no net loss test; whether or not an application on the water right is or is not approved. The discontinued use promised by the plan is what provides actual benefits to streams.
Item 1B compliance with 2022 FWMP for surface water rights is unclear and portions of their concepts in the compliance section do not exist. The transfer of a surface right does not meet the no net loss standard. A transfer to an in-stream lease under the Groundwater Mitigation Program will only provide temporary credits and Thornburgh could allow it to expire or cancel the lease. A cancelled water right does not provide mitigation and there is no cancellation in lieu of mitigation program. Transferring water in-stream can be used to offset impacts of groundwater use by the Resort. Thornburgh has made no commitments in the FWMP to perform an OWRD Mitigation Project.	Lambie February 23	Mr. Lambie states there is no cancellation in lieu of mitigation program, yet in an earlier submittal he states that what the applicant refers to as cancellation in lieu of mitigation is OWRD's Offset and Voluntary Cancellation Option that provides mitigation as noted by Mr. Lambie. As for surface water transfers, as Mr. Lambie noted before they raise the question of the location and timing of the impacts. Thornburgh experts modeled the changes to determine whether they, as a part of the whole FWMP met the no net loss standard and determined the 2022 FWMP exceeded the no net loss. The other method that will do so is transferring water in-stream. While there is no commitment to do so, this is an alternative discussed in the 2022 FWMP.
Item 1C – use of exempt wells is a change from the 2008 FWMP and Condition 38. It now allows use of exempt wells through and beyond Phase A-1 after the water system is built without explaining how it will guarantee 3.65 AF of mitigation for that use.	Lambie February 23	The 2022 FWMP plainly states that the use of exempt wells will be discontinued prior to the completion of Phase A-1. In the event that applicant uses 3.65 AF of water this will not create any impacts that are not being mitigated for already as the record shows that the applicant owns all 1,211 of the water described in the 2022 FWMP that is not presently being pumped. The bulk of this is groundwater that is in the aquifer providing mitigation to comply with the no net loss standard.

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		This does not count the 106 AF of TSID water that is already permanently instream.
Action 4 is confusing and not reliable.	Lambie February 23	Action 4 requires specific things to be reported, including: i) the total amount of groundwater left in the aquifer, ii) the total amount of surface water transferred in-stream (permanent or temporary) and: iii) any mitigation credits that are owned. The report of today would include: <ul style="list-style-type: none"> i) groundwater that is presently in the aquifer, ie: the Dutch Pacific: 49.5 AF, Tree Farm: 327.5 AF, and BFR 1&2: 633.7 AF, ii) surface water that is transferred instream, ie: TSID: 106AF, Mitigation credits: 0.
Thornburgh's use of the wells beyond the limits of an exempt well is not an exempt use	Lambie February 23	Thornburgh has not proposed to use the exempt wells beyond the limits imposed by water law.
Item 4 Compliance Reporting is a "strange accounting" because it counts total amount of groundwater left in the ground as mitigation water and counts temporary mitigation credits. The only type of instream mitigation credit that can accrue is a dedicated permanent instream use.	Lambie February 23	The compliance procedures are designed to ensure compliance with the no net loss standard. They are not focused on reporting the mitigation required by OWRD. As has been noted before the accounting is to provide a tally of the work done and the benefits provided over time. It is not a claim that the water that flows through the river today will provide benefits into perpetuity.
Thornburgh is no providing 1123 AF of FWMP mitigation water in advance of pumping because fish habitat does not have mitigation from water that is not being pumped today.	Lambie February 23	This is a matter of semantics; not fact. It is obvious that placing new water instream before it is being used will provide flow and temperature benefits for habitat and this is properly considered an excess benefit of the mitigation program. The mitigation program, without this benefit, has been shown to meet the no net loss test. This is covered in greater detail herein.
Thornburgh has not established it has 1123 AF of water as a volume or yearly rate.	Lambie February 23	The evidence shows that Thornburgh owns the water rights that are included in the 2022 FWMP. This is covered in greater detail herein.
Thornburgh findings demonstrate a net decrease to discharges down to Culver as that is where the groundwater discharge to surface water decreases to the Deschutes and Crooked River will be experienced.	Lambie February 23	Flows in the Deschutes River see a general increase with a corresponding decrease in temperature. In the Crooked River, there are slight decreases in flow in amounts so small they cannot be measured using current technology. Similarly, the change to temperature is so small as to not be measurable as well. Thornburgh's expert fish biologist Lucius Caldwell, Ph.D, assessed the net effect of the changes

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		<p>on both the Deschutes and Crooked Rivers. Regarding the Deschutes River, CDr. Caldwell stated: <i>“Overall, the combined effects of planned groundwater pumping and mitigation appear to be a net benefit for both habitat quantity and quality within the Deschutes River, throughout the vast majority of the irrigation season.”</i> On the Crooked River he noted: <i>“Overall, the combined effects of planned groundwater pumping and mitigation appear to vary seasonally within the Crooked River. During the spring and fall, a net impact is expected for fish habitat quantity and a net benefit for fish habitat quality. During the summer, a net benefit is expected for fish habitat quantity and a net impact for fish habitat quality.”</i> Lucius Caldwell, Ph.D</p>
<p>Thornburgh’s claim that the 2023 FWMP is superior to the 2008 FWMP is a misrepresentation because Thornburgh’s findings show a net decrease in discharge to the Crooked River</p>	<p>Lambie February 23</p>	<p>Mr. Lambie is incorrect. The 2008 FWMP authorizes roughly 50% more groundwater pumping and, therefore, allows greater impacts to the Crooked River than allowed by the 2022 FWMP. The big difference as relates to the Crooked River is that the 2022 FWMP substantial groundwater mitigation directly at the areas affected by Thornburgh pumping. Table 1 of Thornburgh 2/8 rebuttal shows a comparison between the 2022 and 2008 plans and the impacts to the Crooked River. Column Ho shows the difference in groundwater discharge between the 2022 and 2008 plans at Osborne Canyon and Opal Springs. In both cases the 2008 plan reduced streamflows far more than the 2022 plan (0.75 cfs) at Osborne Canyon and (1.78 cfs) at Opal Springs. This is but one area the 2022 FWMP is far superior. As noted in greater detail herein, the 2022 plan is superior in nearly every metric.</p>
<p>An increase in flows in the Little Deschutes River is not identified because Mr. Lambie speculates that approval of a transfer of the point of diversion will be denied by OWRD and without instream transfer of the water right.</p>	<p>Lambie February 23</p>	<p>The 2022 FWMP states the LeBeau water right can alternatively be transferred instream for mitigation credits or can be canceled in-lieu of mitigation (Offset Voluntary and Cancellation Option according to Mr. Lambie). Each of these methods will provide flow in the Little Deschutes as the water that would otherwise be pumped under the valid LeBeau water right from the Little Deschutes River will remain in that river and increase flows regardless of the method of use. OWRD approved this type of mitigation, leaving water instream without an instream or other transfer, for Eagle Crest and considered the cessation</p>

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		of pumping water as providing benefits from the point of prior diversion north of Bend to Lake Billy Chinook.
Analysis of stream temperature changes is inadequate beginning with the fact there is no analysis of decrease in groundwater discharges to the Crooked River.	Lambie February 23	As has been noted repeatedly there has been extensive modeling of the Crooked River as well as the effects of any changes on fish habitat. Further details are included herein.
The modeling tool used is not capable of resolving thermal stratification or other characteristics of habitat flow (see Nov 4 E-Pur)	Lambie February 23	Any modeling has its limitations. It is difficult to model each individual cell of the river, with any modeling tool. The QUAL2Kw is no exception. The experts who did the modeling broke the impacted areas into nearly 2,000 individual cells that were assessed. In addition, detailed analysis was completed on 7 individual spring locations in the Crooked River, the Deschutes River, and Whychus Creek that ODFW felt important to undertake more detailed analysis on. The result is a detailed analysis of areas affected by Thornburgh's pumping.
Thornburgh is not improving Whychus Creek habitat over and above mitigation provided by TSID mitigation that mitigated the Resort's impacts on Whychus Creek.	Lambie February 23	Mr. Lambie is correct that the TSID mitigation fully mitigates all impacts of the Resort's pumping of consumptive water from groundwater on Whychus Creek. In addition the evidence shows the cessation of pumping of the Dutch Pacific well also adds groundwater discharge into Whychus Creek that provides additional benefits.
Thornburgh's additional mitigation (beyond TSID) will be detrimental to TSID's improvements. If their funding agreement is never consummated to a payment Whychus Creek will be better off because the benefits of TSID's project will not be reduced.	Lambie February 23	This claim is unsubstantiated. The payment of funds to TSID does not reduce the benefits offered by the now completed TSID project. Further the evidence shows the funding agreement is already executed and binding, and accepted by the Courts. This is a collateral attack against such prior decisions approving the FMP.
Thornburgh's claim of an increase in habitat quantity and quality in the Deschutes River is a misrepresentation because its studies show some locations where habitat and flows will not be better.	Lambie February 23	Thornburgh did not misrepresent the results of its studies. Studies show a clear net benefit in the Deschutes River which is what is required by the no net loss test. Furthermore, none of the locations where flows decreased slightly, and temperatures increased slightly (by an immeasurable amount) resulted in a loss of habitat for fish or other aquatic species. The analysis of the effects of the 2022 FWMP on fish habitat in the Deschutes River by Dr. Caldwell shows a net benefit in habitat quality and quantity. Lastly, Mr. Lambie is not an expert in

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		Fisheries habitat and any comments from him pertaining to this should be disregarded.
Thornburgh's claim that its results are based on a steady state model are a misrepresentation. One consultant used a 14-year period of extraction to model impacts and should have used a steady state model. Another consultant used a temporal one-day model for thermal impacts rather than a steady state model.	Lambie February 23	The only temporal one day model used (which incidentally is what ODFW performed on Whychus Creek) was the thermal modeling done on the Little Deschutes. It was only used there as the impacts were minimal and the complete spectrum of data required to perform the QUAL2Kw model was not available there. The modeling incorporated both groundwater discharges and groundwater withdrawals. As noted, they will increase over time, both doing so generally in relation to each other over time until they reach their maximum effects.
Illogical for 2022 FWMP to claim 84% cold groundwater mitigation and claim it leaves cool water instream. Thornburgh's analysis shows there will be lower volumes of groundwater discharge – resulting in lower volumes of cold-water discharge to rivers.	Lambie February 23	The calculation is simple math. Leaving groundwater in the ground increases discharge into the river. In every case except for the Crooked River, the 2022 FWMP shows an increase of groundwater discharge. As stated repeatedly that is found in Table 1, of the March 8 rebuttal.
Thornburgh's analysis shows net reduction in baseflow of the Deschutes River and localities of warming, no analysis of cool water benefits in the Little Deschutes River or Indian Ford Creek. It also show sizeable decreases in groundwater discharge to the Crooked River but no analysis of thermal or other impacts in the Crooked River	Lambie February 23	The evidence shows that flows are increased in the Deschutes River with corresponding reduction in temperatures. Modeling addressed flows in the Little Deschutes and Indian Ford Creek. Thermal analysis was performed on the Little Deschutes and analysis was performed on the Crooked River of the flows, thermal impacts and also the benefits of the improvement to fish habitat resulting from the \$400,000 in funding provided for specific mitigation programs on the Lower Crooked River with CWRC. These measures are not relied upon to meet the no net loss standard, but are of additional benefit. Previous testimony, including that by ODFW, agree that impacts to the Crooked River are insignificant enough to be deemed as "noise."
There is no basis for a claimed increase in summertime flows in so-called critical areas.	Lambie February 23	The evidence shows the critical areas are areas that ODFW noted were of concern. The modeling was done using the actual rates of extraction under the irrigation certificates which was measured against the expected summertime usage from the resort pumping. This resulted in increased flow in all areas save the Crooked River. Crooked River impacts are not biologically significant, according to fishery biologist opinion.

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<p>There is no basis for claims of reduction in stream temperatures because applicant describes groundwater discharges as being reduced and no mitigation water is being put instream.</p>	<p>Lambie February 23</p>	<p>The applicant did extensive modeling and provided 20+ technical reports that show increased streamflow and reduced temperatures in virtually all affected reaches.</p>
<p>Claim that source of resort’s water supply remain exclusively groundwater is a gross mischaracterization. In 2008 the planned source of water was only groundwater. The current source of supply includes surface water of the Little Deschutes and Deep Canyon Creek.</p>	<p>Lambie February 23</p>	<p>The statement by Thornburgh that the source of water for the Resort is groundwater pumped on its property is accurate. In 2008, this pumping was allowed and offset exclusively by retiring surface water rights. In the 2022 FWMP, groundwater rights and surface water pumped from groundwater authorizes Thornburgh’s pumping from groundwater. The source remains the regional aquifer.</p>
<p>Deep Canyon rights are being appropriated along with groundwater rights from the same well and are interfering with one or more groundwater rights. Due to this interference noted by OWRD, these rights will become junior water rights and will be regulated off when groundwater levels fall below their criterion levels and that will happen based on trends in the Middle Deschutes area.</p>	<p>Lambie February 23</p>	<p>The evidence shows Thornburgh is transferring the Deep Canyon rights to wells at the resort. There is no evidence that this will interfere with any wells in the Deep Canyon area. Further, the evidence shows that no groundwater right have been regulated off. But if Mr. Lambie was correct, and Thornburgh’s water were regulated off Thornburgh would not be able to pump water and there would be no impact to the fisheries habitat. Further, interference is a legal term defined by OWRD. OWRD’s analysis of interference claims is relevant and is included in the final Tree Farm order contained in this record. It is persuasive in showing that no interference will occur, especially when other wells have not fully penetrated the aquifer. The record shows that no surface or groundwater regulation off has occurred.</p>
<p>The surface water rights from BFR are imperiled. The conditions of the groundwater POA approval will trigger curtailment.</p>	<p>Lambie February 23</p>	<p>This is not correct and speculative. OWRD has a legal definition of interference that may cause curtailment. Analysis provided in the Tree Farm final order is instructive. Interference that merits curtailment does not occur unless the well impacted fully penetrates the aquifer. Mr. Lambie’s analysis does not claim that this will be the case. The record also indicates that exempt domestic wells are not drilled to fully penetrate the aquifer.</p>
<p>Cancelled rights must be assigned to a specific groundwater permit.</p>	<p>Lambie February 23</p>	<p>The FWMP states that any cancelled water right would be assigned to a particular permit, ie: G-17036, or G-19139.</p>

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Tribe are uncertain regarding modeling of impacts and lack of clear, concise and objective compliance standards and compliance with no net loss/degradation test	Tribes March 8	These are the same arguments made by ODFW and others. We have responded to them elsewhere in this chart and decision.
Tribes disagrees with Cascade Geoengineering that the “DB HCP” and threat of litigation does not impact Thornburgh’s proposal; lawsuit threatens fish species at expense of spotted frog	Tribes March 8	The Tribes notes the HCP threatens fish species because of the spotted frog. It does not claim Thornburgh is threatening the fish species. There is no evidence showing that Thornburgh’s 2022 FWMP will change flows more or less in the affected reaches due to the threat of litigation against the HCP or its outcome. Thornburgh is providing mitigation and modeling the effects to fish habitat based on the actions described in the 2022 FWMP that are showing compliance with the no net loss. Thornburgh need not mitigate for HCP impacts, only its own.
Prior resort approvals indicate the County’s strong reliance of the opinions of ODFW as a biological expert	Bragar March 8	ODFW’s concerns focus almost exclusively on Oregon water law; it is not an expert on water law; Deschutes County has never relied on ODFW as an expert in water law. CMP Condition 27 that required ODFW approval was replaced by CMP Condition 37 which did not provide a similar role for ODFW.
Only Eagle Crest sourced water from onsite wells. Others obtained water from “elsewhere.”	Bragar March 8	Water obtained from “elsewhere” also comes from groundwater. In any case, water use by the Resorts had some impact on surface water in the Deschutes Basin and fish habitat due to the hydrogeological connection of the two systems.
All Resort approvals received ODFW approval of their mitigation plans	Bragar March 8	ODFW approval is not required by any relevant code criterion. It is not appropriate for Deschutes County to ignore superior evidence provided by an applicant because ODFW does not agree. ODFW specifically testified below that, contrary to the language of FMP Condition 38, there is no legal agreement between ODFW and the Resort regarding the Resort’s mitigation plans. .
Thornburgh is to blame for ODFW’s failure to timely review and approve the 2022 FWMP	Bragar March 8	The evidence shows that Thornburgh first approached ODFW in July of 2022. It also show that there was substantial interaction between the applicant and ODFW. The applicant provided substantial information and responded to numerous ODFW requests for data and information, even to the extent of redoing modeling in a manner that ODFW requested. Yet, to date, according to ODFW, they have not reviewed the main modeling results, months after receiving them.

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None of the proposed sources of water in the 2022 FWMP provide an actual legitimate permanent source of water for the Resort	Anuta March 1	The Resort has a valid, non-cancelled water rights permit G-17036 and is applying for approval to transfer other rights. It has obtained approval of a temporary transfer of the Tree Farm water right. The issue in this case, also, is not the availability of water for use by the Resort. The issue is whether the impacts of using groundwater by the Resort will be mitigated such that there will be no net loss.
Cancellation is not allowed under the OWRD Deschutes Basin Groundwater Program where the water rights used are existing water rights.	Anuta March 1	As noted by Mr. Lambie and confirmed by the applicant, mitigation from a cancellation simply is assigned to a particular permit.
OWRD rules and no net loss are different	Anuta March 1	This is correct. Ms. Gould’s expert, Mr. Lambie, incorrectly conflates the two and uses OWRD rules to disregard the real benefits provided by the 2022 FWMP – such as the acknowledged benefit of TSID mitigation which does not authorize pumping by Thornburgh. Thornburgh has proven that the no net loss test is met by its mitigation plan.
Water left in stream by cancellation of a water right merely goes to the next user in line. Cancellation and non-use of water rights does not result in mitigation because other users will simply use the same water.	Anuta March 1	The evidence shows this is not correct, that cancellations provides mitigation. This is explained in detail in this and numerous other technical submittals by both Thornburgh’s experts and Mr. Lambie.
Cancellation of water rights simply does not equal mitigation. The only way to provide actual wet water is an instream water right (ISWR)	Anuta March 1	The evidence shows an ISWR is one method, not the only one. Mr. Lambie and Mr. Newton both note cancellation is an accepted form of mitigation.
Every withdrawal of water must be offset by the addition of an equal amount of water to the river system because, otherwise, stream depletion is occurring. The 2022 FWMP does not provide this.	Anuta March 1	The extensive technical analysis and the 20+ technical reports show the 2022 FWMP increases stream flow.
ORS 536.270 is not relevant (certificated water rights). It only provides that a certificate is evidence of priority and extent of appropriation. It does not address	Anuta March 1	The evidence shows that all permits described in the 2022 FWMP are wet water rights where there is a sufficient supply of water to allow them to be pumped. The evidence also shows that no groundwater rights have been regulated off for lack of water.

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whether there is sufficient water available to allow water to be pumped.		
Thornburgh has released its contractual right to purchase more than the 614.8 AFY of BFR rights it currently owns; the 2008 FWMP called for a purchase of 1,859 AFY	Lambie January 30	This is not relevant to the proceeding. The release of one agreement does not indicate or change the status of any other agreement with BFR or any other party. The evidence shows Thornburgh owns the water that is included in the 2022 FWMP and that it was not pumping any of that water at the time of this application.
Thornburgh represents that Permit G-17036 is viable and they can mitigate for the impacts of use of the full water right.	Lambie January 30	The permit is valid and non-cancelled. This issue has been litigated repeatedly and upheld at every level, the hearing officer, LUBA, the Court of Appeals, and the Oregon Supreme Court.
The transfer of BFR rights T-14074 is inconsistent with their FMP regarding water supply and mitigation for water use at the Resort property. They would have no mitigation water at all to offer under T-14074.	Lambie January 30	The evidence shows T-14074 does not require OWRD mitigation as this is a transfer application of existing water rights and no additional water will be withdrawn from the Deschutes Basin as a result of approval of the transfer.
E-Pur staff used 2017 USGS 2017 Regional Model to simulate water use and impacts to model impacts of extraction of water at Thornburgh while foregoing diversion of Deep Canyon Creek water. It shows that groundwater discharging to the Crooked River would be reduced by the transfer of what would otherwise have been surface water flowing into the Deschutes River. The impact of water use increases over time.	Lambie January 30	E-Pur modeled the impacts of pumping from Thornburgh wells and compared that to foregoing diversion of Canyon Creek water. This results in faulty analysis as the Deep Canyon water was already transferred to a groundwater point of appropriation of wells at Big Falls Ranch (BFR). For accuracy E-Pur staff should compared pumping at Thornburgh wells to stopping pumping at BFR wells. That would result in an accurate measurement of the impacts. The evidence shows that modeling this way results in substantial mitigation in the Crooked River.
I proved in my 11-4-22 Memo that no proposed source of water in the 2022 FWMP is a legitimate permanent source of water. Transfers have been requested but no permanent transfer has been approved.	Anuta February 1	This claim has no bearing on the no net loss standard. In 2008 there was no permanent source of water. This claim appears to be based upon the false premise that G-17036 is the only approved or required source of water. That contention has been made and rejected in prior decisions regarding other Resort applications. .
Cancellation and non-use cannot be relied on to provide mitigation. Water not used will go to junior water users who are the “next person in line.”	Anuta February 1	The evidence by Mr. Newton and Mr. Lambie both show cancellation is an acceptable form of mitigation. Furthermore, the evidence shows that groundwater rights have not been regulated off, which means there is no next user in line to get the water. The measures of the

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		Deschutes Basin Groundwater Program do not allow new groundwater withdrawals and this helps assure the future efficacy of the proposed transfers and mitigation measures.
LeBeau cancellation or non-use not effective because there is a downstream user with a junior water right who will use the LeBeau water.	Anuta February 1	For the reasons stated above this is not true.
Water added by Dutch Pacific's cancelled water rights would be taken by the holder of a junior groundwater right within five miles of the Dutch Pacific POA or by the City of Sisters.	Anuta February 1	For the reasons stated above this is not true.
Whatever amount of water Thornburgh pumps has to be fully mitigated by an equal amount of permanently protected instream surface flow. Without this, stream depletion will occur, and the no net loss test won't be met.	Anuta February 1	The evidence shows a permanently protected instream water right is one way to provide mitigation or offsets. It is not the only way. This is also not the legal standard. The no net loss standard only requires Thornburgh to address its impacts such that there is no net loss.
The reduction of the right under the existing land use approval to use 2129 AF per year of groundwater to 1460 AF is not a resource benefit because the applicant is not required by the FMP to use all of its water rights and is required by law to conserve water. It also appears that the applicant will reduce its water use whether or not the 2022 FWMP is approved.	Tribe March 1	Voluntarily reducing water usage is beneficial and should be encouraged as it incurs less impact on fisheries habitat, leaves more water in the stream and in the aquifer. The technical analysis of the 2022 FWMP includes showing why reduction in water use is beneficial and meets the no net loss standard.
Reliance on the transfer process for compliance requires scrutiny. OWRD is recommending denial of the transfer of the LeBeau water right because it is not in the same aquifer, will interfere with existing rights and does not meet the definition of "similarly" and will impact flows on the Crooked and Deschutes Rivers.	Tribe March 1	The evidence shows there are numerous methods that applicant can utilize the LeBeau water to comply with the 2022 FWMP. In addition to the transfer the 2022 FWMP allows for cancellations in lieu, or a transfer instream that would provide mitigation for other water rights permits.

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<p>OWRD transfer process does not consider fish and wildlife impacts; it addresses other issues.</p>	<p>Tribe March 1</p>	<p>The extensive modeling done by Thornburgh addresses fish and aquatic habitat. The comprehensive summary of the effect on fish habitat summarizes those impacts stating that the 2022 FWMP provides a net benefit to fish habitat quality and quantity.</p>
<p>The Tribes don't understand how OWRD determines the reliability of a water right and wants additional time to learn more about the process.</p>	<p>Tribe March 1</p>	<p>The Tribes has unlimited time to explore issues with OWRD. Thornburgh is not hampering their efforts to become better informed.</p>
<p>Groundwater flows are not protected instream; they will become available for consumptive use by another water user – either in groundwater or from surface water once it enters waterways.</p>	<p>Tribe March 1</p>	<p>The evidence shows that groundwater, while not legally protected instream in the manner that surface water is protected is still protected by law. You must have a permit to extract groundwater and can only extract the amount you are allowed. Groundwater rights not pumped cannot be claimed and used by the holder of a surface water permit. Mr. Newton, a CWRE has strongly refuted that position and we agree with his opinion on this topic.</p>
<p>Tribe not yet satisfied that no net loss test is likely and reasonably certain to be met</p>	<p>Tribe March 1</p>	<p>The application for this modification was submitted on August 17, 2022, nearly 7 months ago. The Tribes had the opportunity to review the materials at any point. That they chose to first engage in January and have not had the time to work through materials is no fault of the applicant. The applicant has provided extensive technical materials, and has engaged with the Tribes to assist them, going so far as to enter into an agreement to fund a mitigation program with the CWRC at least in part at the request of the Tribes. That program is not related to the no net loss test, but instead to address the Tribe's concerns.</p> <p>The Tribe also seems to not understand the relevant test, stating in submittals that each and every stretch of every water way must have a net benefit. That is not the test. The test is whether there is a no net loss to the entire system. Further, it is more than relevant that the only biological opinion related to Thornburgh's impact in this record is that the 2022 FWMP provides a net benefit to habitat. L. Caldwell.</p>
<p>Modeling is built on assumptions; Tribe is concerned with use of 2016 to set a baseline because conditions are likely different now.</p>	<p>Tribe March 1</p>	<p>The applicant has provided information that 2016 was a reasonable year to use and that it provided conservative results, particularly as</p>

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		opposed to a dry or drought year in which the evidence shows the benefits provided by the applicant would be even greater.
The Deschutes Basin Habitat Conservation Plan mandates a new water management regime over time that was not modeled.	Tribe March 1	The HCP is under a threat of challenge. Whether its measures will or will not be implemented is unknown. Thornburgh must only mitigate for its impacts.
Cancellation of water rights does not legally protect it instream	Tribe March 1	As noted repeatedly throughout this document, Mr. Lambie’s submittal and numerous submittals of Mr. Newton demonstrate that this claim is not correct.
Excess mitigation should not be considered because it is simply a feature of the 2022 transfer strategy and not a result of a mitigation action and its benefits are not assured.	Tribe March 1	The no net loss standard refers to the “net” which is a total of the accounting of the benefits or mitigation being provided less the total of the impacts created. In compiling the net, it is reasonable to add all benefits and then subtract the total of all the impacts. The evidence shows that the excess mitigation while it may be temporal is a benefit. As such, it is reasonable to account for it. That said the evidence shows the applicant did not account for the excess mitigation in order to comply with the no net loss standard. Compliance was achieved without the addition of the excess mitigation but its benefits to habitat are real.
Juniper removal is not a stand-alone water mitigation strategy and is not a permanent benefit.	Tribe March 1	The evidence shows Thornburgh is undertaking a substantial treatment program as part of the wildlife mitigation plan, which can provide water savings of between 304-912 AF annually, a portion of which can increase discharge doing so for a period of at least 14 years. While this is likely to provide water savings, the applicant did not rely on it to meet the no net loss standard.
Tribes believe a riparian restoration project should be required.	Tribe March 1	In consultation with the Tribes the applicant has entered into a partnership with the CRWC for the improvement of 11 miles of lower Crooked River and for the complete clearing of 1,050 acres of Juniper trees in the Crooked River watershed. The benefits that this will provide are substantial in terms of fish habitat. The clearing program can also provide water savings of around 210 af per year, which can increase discharge into the Crooked River. Thornburgh is establishing a funding mechanism that will operate into perpetuity that can keep the trees cleared into the future. This is not relevant or required to meet the no

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		net loss standard, but is offered by Thornburgh to address the concern of the Tribe.
The 2008 FWMP has a level of reliability and transparency not provided by 2022 FWMP	Tribe March 1	The 2022 FWMP has provided proof the water is already owned, is not being pumped and is already providing benefits to fisheries in advance of any pumping. A large component of the 2022 and 2008 plans are the same, ie: the BFR Deep Canyon water and the TSID water. In both cases the mitigation being provided by both have already occurred. Pumping of the Deep Canyon water has ceased and is already in the aquifer. The TSID water has been transferred permanently instream already, completing the required TSID mitigation.
2022 FWMP uses a “unique” water transfer strategy; Tribe needs to confer with OWRD	Tribe March 1	The evidence shows the 2022 plan is based on simple and accepted principles. Eagle Crest already relied upon a similar strategy. The Tribe seems to conflate OWRD mitigation and mitigation under the County’s no net loss standard. They are not the same and Thornburgh needs to show that the 2022 FWMP meets the County’s standard. It has done so.
No net loss must be coordinated with actions under HCP	Tribe January 31	The no net loss standard doesn’t require the applicant to mitigate for actions and events under the HCP.
The baseline resource need is higher and ESA expects this higher target to be met (p. 7)	Tribe January 31	This is not a requirement of the no net loss standard.
The FWMP was likely developed based on a three golf course plan; the environmental impacts of this change should be considered.	Tribe January 31	The impacts of building a golf course identified by the Tribe other than a reduction in water use relate to the terrestrial WMP; not the FWMP.
The fishery resource is treaty protected; there may be ESA “take” liability related to MCR steelhead	Tribe January 31	The evidence shows that the 2022 FWMP increases streamflow and reduces temperatures in nearly all reaches effected. In addition, the applicant provide a comprehensive fish summary that concluded the 2022 FWMP provides a net benefit to the fishery habitat quality and quantity. Take liability is not regulated by Deschutes County, it is a separate regulatory scheme and not relevant to these proceedings.
ODFW is concerned re springs and seeps	Tribe January 31	The applicant has provided substantial information showing the impacts to seeps and springs has been offset, resulting in benefits to the resource. For example, the applicant provided detailed modeling and analysis of 7 separate and individual springs at the request of ODFW.

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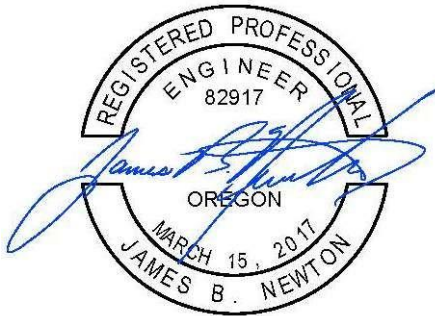
Groundwater is subject to future appropriation (not legally protected) so it must be ensured that benefits are resilient.	Tribe January 31	While the no net loss standard does not require that the applicant mitigate for future appropriations that fact that they have voluntarily reduced their consumption of groundwater is very positive action and should be applauded.
Assessment should consider newly released information in the NMFS Bi-Op and ITP	Tribe January 31	This is not relevant to Thornburgh’s impacts, it relates to the Tribe’s own reintroduction program. Thornburgh must mitigate for its impacts under the no net loss standard.
OWRD approval is not assured. Any changes in water supply plan must undergo further County review.	Tribe January 31	The 2022 FWMP commits to providing the water listed in the plan to meet the no net loss standard. A new condition 40 permits additional review in the land use context if changes are necessary.
2022 FWMP does not comply with DCC 18.113.070(K), Water Availability because it does not have an approved source of water	COLW, Bragar et al	Thornburgh has two approved sources of water – G-17036 and temporary transfer of Tree Farm water rights.
FMP and FWMP approved based on G-17036; former CMP Condition 10 required approval of a water right permit prior to approval of FMP	COLW - March 1	This is a non-issue and has been decided against opponents in previous proceedings. None of the approvals cited required G-17036 or any specific water permit. Water availability was resolved at the CMP stage and cannot be collaterally attacked now.
Thornburgh is in violation of Condition 10. FMP finding said a condition (Condition 10) was imposed requiring documentation of required mitigation and a water rights permit for each development phase. Thornburgh did not obtain a state water right permit for resort consumption.	COLW – March 1	Thornburgh obtained a water right for resort consumption in 2013. A request for an extension of that permit is pending at OWRD. The issued permit is non-cancelled. The meaning of Condition 10 has been settled by LUBA and the Oregon Court of Appeals in numerous cases. Thornburgh has provided the same evidence in this case as in others where it was found compliant.
County lacks authority to make a land use decision because Thornburgh is in violation of Condition 10 due to the provisions of DCC 22.20.015	COLW – March 1	This is simply not the case; there has been no adjudicated code enforcement issue (or even a code complaint or noncompliance complaint). The Board has already interpreted this provision and it does not apply here.
After July 2022, not plausible to argue for possible extension of G-17036; OWRD issued a superseding proposed final order with findings that are not changeable so cases	COLW – March 1	This argument is based upon the false premise that only G-17036 may be used. Additionally, the legal status of G-17036 remains the same; valid and non-cancelled but subject to protest by Ms. Gould.

Exhibit A to Board Decision
Incorporated into Board Decision

cited by Thornburgh re fact Condition 10 are not binding		
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**THORNBURGH RESORT
FISH AND WILDLIFE MITIGATION PLAN**

**ADDENDUM #2 (2022 FWMP)
RELATING TO POTENTIAL IMPACTS OF THORNBURGH'S
REDUCED GROUND WATER WITHDRAWALS ON FISH HABITAT**



Renews: 1/1/2025



Renews: 5/1/2023

Prepared for:

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August 16, 2022
As reorganized on
January 31, 2023

Project: Thornburgh Resort

*FISH AND WILDLIFE MITIGATION PLAN - ADDENDUM #2 (2022 FWMP)
RELATING TO POTENTIAL IMPACTS OF THORNBURGH'S
REDUCED GROUND WATER WITHDRAWALS ON FISH HABITAT
August 16, 2022 (As reorganized on January 31, 2023)*

I. Introduction

This report was prepared by Jim Newton, PE, RG, CWRE, Principal of Cascade Geoengineering ("CGE") on behalf of Central Land and Cattle Company, LLC, owner, and developer of the Thornburgh Resort ("Thornburgh") as an Addendum to the Thornburgh Resort and Wildlife Mitigation Plan regarding potential impacts on fisheries and aquatic habitat and the specific measures to mitigate for any negative impacts. It incorporates elements of and replaces the "Addendum Relating to Potential Impacts of Ground Water Withdrawals on Fish Habitat" dated April 21, 2008 (the "FWMP") developed by Newton Consultants, Inc. ("NCI") and supplements thereto.

The mitigation requirements and enforcement measures are set out in Section II, below. The following section discusses the results of the mitigation measures. The remainder of the document provides background information and scientific analysis based of thermal modeling and analysis by highly qualified experts and an expert analysis of the effects of pumping and mitigation on fish and other wildlife that are dependent on the quality or quantity of Deschutes Basin rivers and streams.

II. Thornburgh Mitigation: DCC 18.113.070(D) - The No Net Loss/Degradation Standard ("No Net Loss").

The proposed mitigation measures are designed to ensure No Net Loss of habitat quantity or quality and net benefits to the resource and are comprised of four categories including:

- A) Reduce water use and thus reduce impacts on the aquatic habitat (Item 1 below):
 - 1. limit groundwater pumping to a maximum of 1,460 AF annually, which is more than a 30% reduction in originally approved water usage.
- B) Comply with the No Net Loss standard of DCC 18.113.070 (D) (Items 2-5 below):
 - 2. Use 1,211 AF of existing water rights described herein to authorize pumping of groundwater from wells on the Thornburgh property by transfer, cancellation or other permanent mitigation (e.g., mitigation credits).
 - 3. Comply with requirements for Water Right Permits, Certificates, or Transfers of water rights described herein, or others hereinafter acquired. Provide mitigation when needed in advance of pumping as required by OWRD mitigation rules.
 - 4. For additional supply or mitigation over the water rights specifically identified in this plan, use mitigation credits, COID mitigation, BFR surface water, BFR ground water, or any other water source in the Deschutes General Zone of Impact that will discharge water into (or leave it in) the Deschutes or Crooked Rivers or their tributaries, to supply or mitigate for any unmet needs the resort will have. The amount of water needed is the 1,460 AF of total pumping less the amount of water transferred, cancelled, or converted to mitigation credits, and:
 - 5. Thornburgh has provided 1.51 cfs of water in a quantity of no less than 106 AF of mitigation in Whychus Creek from the TSID diversion downstream by funding the completed TSID piping project called for by the 2008 FWMP that completely mitigates all impacts to Whychus Creek. Nothing more is required here.

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- C) Provide advance or excess mitigation which is not required to meet DCC 18.113.070(D)(Items 6-7 below).
 - 6. Let unused water rights remain in the groundwater or stream to increase flows and reduce temperatures of the streams in advance of creating impacts except as provided to others for drought relief at Thornburgh's sole discretion.
 - 7. Thin thousands of acres of Juniper forests onsite and on BLM Lands.
- D) Compliance and Reporting measures.
 - 8. Detail what constitutes compliance with this FWMP and what reporting actions are required and who will be entitled to receive them.

Section A:

1. Limit Pumping To 1,460 AF Annually:

Groundwater pumping for the resort does not exceed a maximum combined volume of 1,460 AF. This is more than a 30% reduction in the amount of water Thornburgh is currently approved to use. This will dramatically reduce the level of potential impacts, creating less demand and strain on the region's water resources.

Section B:

2. Use OWRD Water Rights Certificates, Permits & Transfers for Pumping or Mitigation:

For the purposes of this FWMP ("2022 FWMP") and compliance with DCC 18.113.070(D), it is assumed the certificated water rights in #a-d below will be transferred to and used at the Thornburgh property. Certificate 89259 (#e, below) is being cancelled in-lieu of mitigation for any Thornburgh groundwater permit granted by OWRD. The Temporary Credit from Deschutes Resource Conservancy (f) have been leased since 2013 and may continue until such time that Thornburgh does not require them, and the Three Sisters Mitigation water (g) has been transferred instream in Whychus Creek.

None of these water rights require additional OWRD mitigation under OWRD's mitigation program. Thornburgh presently owns items a-e which are existing water rights. Rights a-d are being transferred from their original point of appropriation (POA), which would be a groundwater well, or point of diversion (POD), which would be a diversion from surface water, to wells at the Thornburgh property, while e is being cancelled in lieu of mitigation consistent with the Deschutes Basin Groundwater Mitigation rules. Transferring a certificated water right does not require OWRD mitigation, as it eliminates the use of this transferred water right in its former location and allows it to be used, instead, on the Resort's property. Cancelling a right is done as mitigation and results in placing water back in the system by cancelling the legal right to use the water at the original point of appropriation.

While OWRD requires no mitigation for transfers, as they only change the point of appropriation ("POA"), or point of diversion ("POD"), transfers can change the point of impact where the withdrawals will be felt in the stream from one location to the other.

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The change from where the stream was impacted under the original POA to the points of impact from the Thornburgh wells is the only element that could affect the No Net Loss standard and compliance with DCC 18.113.070(D). As such, CGE assessed whether changes in the POA would change the location where impacts are felt in the stream, and if so, how and to what degree that change could affect the no net loss standard and compliance with DCC 18.113.070(D).

- a. **Surface Water Certificate 95746 (4/30/1902) and Transfer application T-13857 (LeBeau)** –Thornburgh owns this certificate authorizing the use of 4 acre-feet per acre of irrigated land of surface water from the Little Deschutes River, a tributary of the Deschutes River, to irrigate 50 acres of land, for a total authorized use of 200 AF of water. An application for a permanent transfer, T-13857, has requested the POD of this right currently at River Mile 56 on the Little Deschutes arm of the Deschutes River to be transferred to a POA on wells located at the Thornburgh Resort, located generally west of RM 143, roughly 105¹ river miles from the point on the Deschutes River closest to the Thornburgh Resort. These proposed changes to the certificated water right do not require OWRD mitigation. Pumping has ceased and this water is currently in the river to flow from its point of diversion all the way to Lake Billy Chinook, about 137.7 river miles². See Map 2. The added flow will provide thermal benefits that cool the Little Deschutes arm of the Deschutes River and the Deschutes River throughout those reaches.

Compliance with this is certificate occurs as described in Section D Compliance, 1(b) below dealing with surface water.

- b. **Surface Water Certificates 96192 and 96190 (4/13/1967) and Transfer T-12651 to Groundwater POA** – Big Falls Ranch (“BFR”) (Deep Canyon Creek Groundwater POA). Applicant currently owns this certificated water that presently authorizes the use of 4 acre-feet of surface water per acre of irrigated lands from Deep Canyon Creek onto of 153.7 acres of land, for a total volume of 614.8 AF of water. This certificated water requires no OWRD mitigation. The POAs of this water are wells located at Big Falls Ranch. Pumping was stopped on 90 acres of this water in September 2021 and the water was assigned to Thornburgh on September 23, 2021. Pumping was stopped on the remaining 63.7 acres in 2022 and a deed conveying this water to Pinnacle Utilities, LLC, was executed on November 30, 2022. (See Exhibit A.) An application has been filed to transfer all 153.7 acres of water to wells at the Thornburgh Resort. Compliance with the FWMP has been achieved.

All 153.7 acres of this water is in the ground at Big Falls Ranch to increase flows of 11 degree C groundwater into the stream reaches affected by the BFR wells that are also impacted by Thornburgh Pumping. This is increased flow of cool groundwater

¹ The Little Deschutes arm, merges into the Deschutes River at RM 192.5 on the Deschutes River. LeBeau POD is at RM 56 on the Little Deschutes arm, which is roughly at the equivalent of Deschutes RM 246.5. The Thornburgh POA is west of Deschutes RM 143. Round Butte Dam is roughly 137.7 miles from the LeBeau POD.

² In 2021 Thornburgh this water placed this water instream (lease) to benefit fisheries habitat. In 2022 it was temporarily transferred to North Unit Irrigation District to provide drought relief to farmers.

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provides thermal benefits cooling the rivers and creeks. While our analysis does not rely on the flows provided by Deep Canyon Creek to achieve compliance with the No Net Loss standard, changing the mitigation source from 13-degree surface water flows in the creek (2008) to 11 degrees C groundwater flows (2022 FWMP) into areas waterways is clearly beneficial. Also not accounted for is the fact that pumping from Deep Canyon Creek has completely ceased, allowing Deep Canyon Creek to flow to the Deschutes River.

In the alternative, if not approved for transfer, this water right could be cancelled in lieu of mitigation for any groundwater permit or Limited License application to serve the Resort. Cancelling a groundwater certificate leaves the water in the aquifer so it can return to streams and rivers. Lastly, the POA could be returned to a POD in Deep Canyon Creek from where it could be transferred to an instream right with mitigation credits issued groundwater or limited license applications. Also, if this proposed transfer is not approved, and the transfer of the water below in **c.** is approved, Thornburgh will replace this water with more of the BFR groundwater rights that are not Deep Canyon Creek rights. Similarly, if the transfer in **c.** below is not approved, but this transfer is approved, Thornburgh may replace the water in **c.** with this water in **(b).** As both are being pumped from the same ground wells, there is no effect which certificate is used to appropriate the water. This water can also be cancelled in lieu of mitigation, or it can be transferred to instream use for mitigation of permit G-17036, or the alternate permit. Neither action impacts the efficacy of this plan.

Compliance with this FWMP regarding these certificates appropriated from the ground is completed as described in Section D: Compliance, 1(a).

- c) **Ground Water Certificate 87558 (BFR)** – Applicant currently owns 18.9 AF of this certificate authorizing the appropriation of groundwater from wells located at Big Falls Ranch to irrigate 6.3 acres. A quantity deed conveying this water to Pinnacle Utilities, LLC, was executed on November 30, 2022. An application for transfer has been filed to transfer all 18.9 AF to wells at the Thornburgh Resort. Thornburgh has filed an application to transfer all 18.9 AF to wells at the Thornburgh Resort. This certificated water requires no OWRD mitigation. Leaving this 11 degree C groundwater in the ground at Big Falls Ranch has increased flows in the same manner as the BFR water in (b) above. As noted above it cannot be converted to an instream right the same way surface water rights can although it could be cancelled in lieu of mitigation for any GW permit serving the resort as described in (b) above.

Compliance with this FWMP regarding this certificate appropriated from the ground is completed as described in Section D: Compliance, 1(a).

- d) **Ground Water Certificate 94948 (1/30/1995), Transfer T-13703 (Tree Farm)** – Applicant currently owns roughly 327.5 AF of water authorizing the appropriation of 0.453 cfs Year-Round for Quasi-Municipal. This certificated water right does not require mitigation. A temporary transfer T-13703 was approved by OWRD which

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changed the POA of this water right from wells located in the Tree Farm subdivision west of Mt. Washington Drive in Bend to wells on the Thornburgh property. It also changed the Point of Use (POU) from the Tree Farm subdivision to Thornburgh wells. A permanent transfer has also been applied for and is in process. Pumping ceased in 2021 increasing the flow of cold 11 degrees C groundwater into the streams. The Final Order approving this transfer was issued on December 7, 2021. At present it can be used per the transfer order, or in the alternative it could be cancelled in lieu of mitigation for any groundwater permit or Limited License serving the resort.

Compliance with this FWMP regarding this certificate appropriated from the ground is completed as described in Section D: Compliance, 1(a).

- e) **Ground Water Certificate 89259 (3/18/1998)** – Dutch Pacific – Applicant currently owns this certificated water right allowing the use of 3 AF of water to irrigate 16.5 acres or 49.5 acre-feet of ground water pumped from a well in Sisters. This is a certificated water right that doesn't require mitigation. The place of impact from pumping at this location is in Whychus Creek and Indian Ford Creek that flows into Whychus Creek near Sisters. Pumping ceased in 2019 allowing all 49.5 AF of water to remain inground to flow to Indian Ford Creek and into Whychus Creek. It is presently being cancelled in-lieu of mitigation. This 16.5 acres of irrigation (49.5 AF) of cool water will provide thermal benefits to the stream that will cool the creek and mitigate for most all the impacts to Whychus Creek from Thornburgh pumping (see Table 8 above). Leaving this water in the stream is like leaving the 106 AF (f below) of Three Sisters Irrigation District (TSID) water (13 degrees C) in the creek in the same area. The TSID mitigation was shown to cool Whychus Creek from its point of diversion to the Mouth.

Compliance with this FWMP regarding this certificate appropriated from the ground is completed as described in Section D: Compliance, 1(a).

- f) **Temporary Mitigation Credits (DRC)** – 6 acre-feet of temporary mitigation credits from the Deschutes Resource Conservancy have been in place since 2013. For nearly 10 years these credits have increased flow to the Deschutes River in advance of pumping groundwater as mitigation for permit G-17036. Excess mitigation has been accumulating since then, further discussed in Section C page 8 below. Thornburgh may cancel the use of these temporary credits at some point in the future, although that is not required by this plan. They are not considered in the efficacy of this 2022 FWMP in meeting the No Net Loss standard.

Compliance with this FWMP regarding these credits are completed.

- g) **Three Sisters Irrigation District ("TSID") Mitigation Water:** Applicant has already completed the arrangements leaving 106 acre-feet (1.51 cfs) of Whychus Creek irrigation water (surface) permanently in Whychus Creek. This is surface water diverted at the TSID diversion near the town of Sisters. See Map 2, pp., 5. It has

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been permanently transferred instream at that point and is providing flow and thermal benefits of the cool 13 degrees C surface water to Whychus Creek all the way to the Deschutes River and then downward into Lake Billy Chinook. The TSID mitigation is 1.51 cfs of flow that is left in the creek for a portion of the irrigation season. In low flow years that may only be 90 days. In heavy flow years that may be 150 days or so. Depending on the flow in Whychus Creek, the actual volume of mitigation water from the rights being purchased by Thornburgh could be as high as 200-300 AF, instead of the 106 AF required to mitigate as determined by Yinger 2008. As noted above, the 106 AF need was determined by Yinger who modeled stream impacts using 2,355 AF of water at 100% consumptive use whereas Thornburgh's current plan reduces pumping to 1,460 AF and consumptive use to 882 AF. The TSID water was shown to mitigate for the full impact of 106 AF of stream reduction at Whychus Creek. As noted above, Thornburgh has completed the required arrangements and this TSID mitigation is presently in the creek.

Compliance with this FWMP regarding this certificate is completed.

3. Comply w/OWRD Mitigation Rules: Provide Mitigation Before Pumping:

Mitigation required for any groundwater permit that appropriates water from wells at the Thornburgh property, will be provided prior to pumping water under that permit, as required by OWRD rules. Mitigation, when or if needed, will be provided by either cancellation of water rights in lieu of mitigation, or transferring the existing surface water rights to instream rights. By providing mitigation water from the conversion or transfer of existing water rights, Thornburgh will be restoring natural stream or groundwater flows to the system at or above an area of impact from Thornburgh wells, much of which will occur during the time period when stream flows are typically the lowest and temperatures are warmest.

4. For Remaining Water Use BFR, COID, or Other Water Benefitting Deschutes or Crooked Rivers:

The water rights described in **Section II-2.** above will provide up to 1,217 AF of the resort's total water needs of 1,460 AF leaving at least 243 AF of additional water needed. For any additional water needed over and above the 1,217 AF, Thornburgh will use some combination of: i) BFR surface water (Deep Canyon or Makenzie Canyon); ii) BFR ground water; iii) COID mitigation water or credits; iv) Temporary credits such as the 6 AF from Deschutes River Conservancy ("DRC"), or v) other ground or surface water or credits that discharge water into either the Crooked River or Deschutes River or its tributaries and meet the requirements of the OWRD mitigation program.

Analysis by Cascade Geoenvironment, LLC shows: i) using additional BFR water with groundwater points of appropriation will comply with the no net loss standard and have no impact to fish habitat; and ii) the transfer of other groundwater rights that discharge cool groundwater into area streams and rivers will provide thermal

benefits to the rivers and streams; and iii) other surface water placed instream above areas of concern will provide thermal mass that will serve to cause cooling during the critical summertime period when stream temperatures are highest and flows the lowest.

5. Provide 106 AF of Additional Whychus Creek Mitigation (TSID):

Thornburgh will provide 106 AF of Three Sisters Irrigation District water for additional mitigation in Whychus Creek. This was required by Condition #39 of the FMP approval. Thornburgh has provided documentation evidencing the funding arrangements required, satisfying condition #39. TSID has completed the project and the water is permanently protected in Whychus Creek. This mitigation was previously proven to result in thermal and flow benefits from the TSID diversion above Sisters throughout Whychus Creek. With the extra water from Certificate 89259, flows are further increased, which is expected to lower temperatures further throughout Whychus Creek and in the Deschutes River onward to Lake Billy Chinook.

Collectively, the measures in **1.-5.** above will demonstrate Thornburgh Resort's continual compliance with Deschutes County's No Net Loss standard in DCC 18.113.070(D), specifically as it pertains to impacts to fisheries and aquatic habitat. The measures discussed in **6.-8.** below will provide excess mitigation that provide additional net benefits to the fisheries resources.

Section C:

6. Leave Water Rights Instream or In the Aquifer Until Needed for Resort Uses:

Thornburgh intends to pump water only as needed. When not needed, it will allow water to flow in the stream, or leave it in the ground, providing advance benefits for impacts to occur at some point in the future. Advance or excess mitigation accumulates from providing mitigation prior to pumping but also during the transient period before impacts are fully realized in the stream. The CGE memo dated August 12, 2022, discusses the accumulation of excess mitigation. Table 5A of that memo shows that Thornburgh, between now and 2071, will provide "mitigation" benefits of 71,771 AF while reducing streamflow by 47,117 AF. This creates excess "mitigation" benefits of 24,674 AF (or more) or the equivalent of roughly 17 years of full pumping of 1,460 AF. Of that excess mitigation, more than 17,000 AF, or nearly 12 years of full pumping by the resort is provided from groundwater.

During periods of severe water shortage, Thornburgh may work with OWRD as to request usage of excess mitigation water that may be used to benefit farmers in significantly impacted irrigation districts, including the North Unit Irrigation District that supports up to 58,000 acres of farmed land in Jefferson County. Thornburgh will request OWRD concurrence and permission from the County to periodically allow it to use its excess mitigation water to provide drought relief to farmers impacted by water shortages resulting from drought, the Habitat Conservation Plan,

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or other extraordinary circumstances causing water shortages for farmers. As discussed above, Thornburgh has applied to temporarily transfer 200 AF of water to the North Unit Irrigation District. Under this exception, until the water rights are pumped by Thornburgh or used as mitigation, Thornburgh would like to be allowed to offer free use of its water to farmers severely impacted. Thornburgh does not intend this as a business, rather it is envisioned as an act of goodwill and a benefit to actual farm uses in the area. Further, any water excesses provided by Thornburgh is purely excess mitigation water that is not needed to mitigate for Thornburgh pumping. As such it will not have a negative impact on fisheries habitat although it could have a very positive impact on farmers. This temporary usage by others may be accomplished by temporary transfers on an annual basis when excess mitigation may be available.

7. Thin Juniper Forests Onsite and On BLM Lands.

Thornburgh is thinning substantial areas of Juniper forests both on site and on BLM managed lands. Juniper is a native species that, with an increase in European settlement in Oregon, has increase substantially throughout Oregon as a result of increased human settlement within Oregon. With this increased human settlement, and the associated changes to the environment through agricultural and livestock grazing practices, Juniper is now often seen as invasive by means of a likely 10-fold increase in prevalence that has been shown to reduce water capture, retention, and recharge to the area surrounding these increased stands of Juniper. Studies show a strong correlation between Juniper removal and increased spring discharges with estimates that may be upwards of 1 acre-foot of increased discharge resulting from the removal 4-5 acres of Juniper forests. Over the last 100 years there has been large expansion in the acres covered by Juniper, which may be impacting water levels. Deschutes and Crook Counties are both looking at Juniper removal as a method to benefit water.

Deschutes County has received Federal funding for Juniper removal and is promoting residents to utilize the funding to remove Junipers. Crook County is looking at the construction and operation of a biomass plant to facility the removal of some of the 600,000 acres of Juniper increases since the 1930's. Over the same time, Crook County officials report an estimated reduction in water flow of 160,000 AF. Experts, such as Tim DeBoodt, Crook County Natural Resource Policy Coordinator, report that the reduction of between 4-5 acres of Juniper trees can save, or return 1 AF of water, ideally in the form of increased ground seepage that may result in increases in spring flow. Crook County hopes to reduce Juniper coverage and subsequently increase stream flows and return some of the 160,000 AF that has been lost from Crooker River flows.

Thornburgh, as part of its development and wildlife mitigation plans, will thin up to 5,000 acres of Juniper forests, returning the land to the condition of the historic old growth forest that was prevalent in the 1930's.

Section D:

Compliance: The purpose of this section is to clarify what constitutes compliance with this updated 2022 FWMP, whether during the review of Resort land use applications, as reported as part of annual monitoring, or for any other purpose. As noted above Thornburgh³ owns 1,211 AF of water rights to be used for pumping or mitigation and pumping at the point of diversion or appropriation of the certificate has been discontinued. For the reasons discussed herein compliance with this FWMP has been met for rights b-f, and will be met for the TSID water (g) in the manner discussed in this Section, 1b below. For any additional water rights that are acquired compliance will be met as described herein.

1. Compliance with this FWMP will occur differently for water appropriated from a surface water Point of Diversion (POD) versus a groundwater Point of Appropriation (POA) or for a mitigation credit as follows:
 - a. POA – Groundwater: For any future rights that may be acquired, compliance occurs upon the cessation of pumping of the rights and along with any of the following: deed evidencing the transfer of ownership, a submittal to OWRD of any of the following: (i) an assignment of the water right to Thornburgh, (ii) an application that seeks OWRD approval of a transfer to pump at the Resort property, or (iii) a cancellation in-lieu of mitigation.
 - b. POD – Surface Water: Once acquired, Compliance occurs upon the cessation of pumping at the source and submittal to OWRD, and OWRD issues a final order (or its equivalent) approving any of the following: (i) an application that transfers to pump at the Resort property, (ii) an application that transfers the water to an in-stream lease, (iii) the cancellation in-lieu of mitigation, or (iv) an application to transfer to obtain mitigation credits, permanent or temporary.
 - c. Mitigation Credit: In the event that Thornburgh acquires mitigation credits, compliance occurs when Thornburgh provides proof of ownership or proof of submittal to OWRD to use the credits as mitigation.

Thornburgh also agrees to the following measures to provide mitigation benefits over and above the benefits achieved by the mandatory measures described above. Noncompliance with these measures shall not, however, be grounds for declining approval of a Resort development permit because these measures are not required to meet any Resort approval criterion, including the no net loss standard:

2. Thornburgh will discontinue the exempt use of all three exempt wells located on the Resort property (referred to as the Kem, Bennet and Price wells) prior to the completion of Phase A-1. Where required for development purposes any of these wells may be physically abandoned and sealed but that is not required for compliance with this FWMP.

³ Pinnacle Utilities, LLC an affiliated company is the Resort's water provider.

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3. Discontinue the use of all purchased water rights listed in Section B2 a-e above (Pg. 3-6) until they are used by the Resort as a transferred water right or as mitigation for pumping groundwater for Resort uses. The following exceptions apply: (1) purchased rights may be pumped if necessary to avoid forfeiture; and (2) purchased rights may be transferred for use by farmers, including those in the North Unit Irrigation District or other party if used for farm use purposes as defined by ORS 215.203 (whether in an exclusive farm use zone or otherwise), if OWRD authorizes a temporary transfer to help address the needs of farmers. Currently, such transfers may be allowed by Executive Order of the Governor declaring a State of Drought Emergency.
4. The Resort has already committed in its FMP to remove and/or thin thousands of acres of Juniper trees from the Resort property and BLM lands to enhance wildlife habitat values. The thinning and removal of Juniper trees can have a dramatic reduction on the consumption of water, potentially saving hundreds of AF of water per year.

Reporting: In addition to any reporting required by OWRD pertaining to water use or mitigation, Thornburgh will provide annual reporting (no later than December 31st of each year) to Deschutes County, with a copy to ODFW's local field office, of the following information:

1. The status of each of the certificated water rights discussed in Section II-B2, including the status of any transfer or cancellation applications affecting any of those rights.
2. Copies of any annual reporting filed with OWRD.
3. An accounting of the total amount of water pumped under any of the water rights discussed in Section II-B (2) between November 1 – October 31 of the prior year.
4. An accounting of the total amount of a) groundwater left in ground, b) surface water left instream (permanent or temporary), or c) water held as mitigation credits (permanent or temporary) in accordance with this Section D, paragraphs a, b & c.
5. The accounting referred to in #'s 3 and 4 of this section will be maintained both annually, and on a cumulative basis.
6. An accounting of the amount and certificate # of any water provided to farmers for drought relief.
7. The amount and source of any OWRD mitigation used to mitigate for the pumping in #3 of this section.
8. Any change in the status of any of the three exempt wells including whether they have been abandoned to date.
9. Consistent with the 2008 FWMP, no additional reporting is required during the review of any land use application related to the Resort.

III. 2022 FWMP Results

Results of Section II-A: Item 1.

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Thornburgh, after listening to the concerns of its neighbors as they pertain to water, has taken dramatic steps to reduce its water footprint. The main point of this 2022 FWMP, is that Thornburgh is voluntarily reducing its water usage from 2,129 AF annually to 1,460 AF annually, a reduction of more than 31%. This reduction reduces every impact that Thornburgh's water usage could create and is the driving principle behind this amended 2022 FWMP.

Results of Section II-B: Items 2-5.

Implementation of the elements of this FWMP described in 2.-5. above and the related OWRD requirements as described herein are expected to result in replacement flow, or mitigation of more than the resorts consumptive use of 882 AF per year at full build-out and to fully mitigate for all impacts to the fisheries resource in accordance with the No Net Loss standard of DCC 18.113.070 (D). At least 1,323 AF (1,211 owned, 6 AF leased and at least 106 AF transferred instream) of this replacement or mitigation water is already owned or leased by Thornburgh, who has ceased pumping all of the water from its original place of appropriation. Where needed Thornburgh has already filed transfers to change the POAs, the PODs, and the places of use of the water rights presently owned. 1,123 AF of this water is already providing the FWMP mitigation called for in this FWMP in advance of pumping.

Thornburgh retained experts to complete and exhaustive analysis of the impacts to stream flow, along with the thermal impacts from Thornburgh's pumping on fisheries habitat and commissioned over 15 technical reports or memo's detailing that analysis. A summary of results includes

- a. Provide a net increase in the discharge of cold ground water via seeps and springs stream flow in the Deschutes River from Crane Prairie reservoir downstream to Culver, including at two spring locations of concern to ODFW above and below the mouth of Whychus Creek,
- b. Provide a net increase in the discharge of cold ground water via seeps and springs in Whychus Creek from Sisters to the mouth, including at important "ODFW" spring locations at Alder Springs and the mouth,
- c. Add cold groundwater discharge versus the 2008 FWMP to the Crooked River, including in important "ODFW" spring areas near Osborne Canyon and Opal Springs,
- d. Increase net flows in the Little Deschutes River from south of LaPine into the Deschutes River,
- e. Increase net flows of the Deschutes River from the confluence with the Little Deschutes onto Lake Billy Chinook,
- f. In most cases reduce net stream temperatures in the Deschutes River⁴,
- g. Increase net flows of Whychus Creek from Sisters to the mouth,
- h. Reduce net stream temperatures of Whychus Creek as noted in "g" above,
- i. Increase habitat quantity in the Little Deschutes River,

⁴ Thornburgh's 2008 mitigation measures estimated an increase in temperature change of 0.00 degrees C at Lower Bridge, 0.10 degrees C at Steelhead Falls, and 0.1 degrees C below the mouth of Whychus Creek. The hearing officer approved these increases which is DEQ's legal threshold for measurable change.

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- j. Increase habitat quantity and improve habitat quality in virtually all areas of Whychus Creek and the Deschutes River, and:
- k. Reduce the thermal impacts in the Crooked River as compared to the 2008 FWMP to levels immeasurable, including in spring areas noted by ODFW, and not likely to cause a change in the quality or quantity of fish habitat.

These elements a-k, above are based on steady state conditions, the point in the future when 100% of the impacts from Thornburgh pumping have been realized in the form of streamflow reductions which may not occur for decades into the future after Thornburgh's pumping begins. Measure C below discusses the excess or advance mitigation being provided to the fisheries resource.

Results of Section C: Items 6-7.

Excess Mitigation: The net results described in Section B above assume steady state conditions, the point in time when full pumping is occurring and the reductions in groundwater discharge into the streams are fully realized. As noted above and in the CGE memo, steady state conditions will not occur for as long as 95 years or more.⁵ Until then, Thornburgh will provide substantial amounts of excess mitigation, likely resulting in un-required benefits during this timeframe. Assuming it will only take 50 years for steady state conditions to occur, Cascade has calculated that Thornburgh will discharge 71,771 AF of water into the system while creating impacts/withdrawals on the system of 47,117 AF, and excess benefit/discharges of 24,654 AF additional water over impacts in that transient than required. In sum the benefits provided are over 52% greater than the impacts created in the first 50 years of this 2022 FWMP, and equal nearly 17 years of full pumping of 1,460 AF. This situation will be most pronounced (nearly 100% excess) in the early years and gradually narrow as the difference between benefits and impacts narrows until steady state conditions are attained.

Juniper Thinning: As the resort is developed it will both clear and thin Junipers from the Thornburgh lands. It will also thin in conjunction with the BLM, approximately 3,400 acres of Junipers on BLM lands.⁶ The benefits to the watershed from Juniper reductions can be substantial and there are concerted efforts to reduce human induced Juniper expansion that has occurred in many areas of the west, including Deschutes and Crook Counties. Many of these efforts are supported and financed by Federal funding. While it is difficult to quantify the exact benefit to the watershed in terms of increased stream flows, the reduction in Juniper coverage has been shown to be positive. When studies show the possibility to save up to 1 AF for every 4-5 acres of Juniper reduction, thinning thousands of acres could provide a significant benefit to nearby stream flows.

⁵ The 2004 USGS model estimated impacts of 100% were reached in year 80 after full pumping is begun. It will take at least 15 years, and perhaps 20-25 years until Thornburgh is fully occupied and pumping at those levels.

⁶ Thornburgh will thin roughly 3.5 acres of Junipers for every acre of land it develops on the Thornburgh site. At the time of the WMP Thornburgh estimated that about 900 acres would be developed.

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A technical report issued by Resource Specialists, Inc. dated January 31, 2023 estimated Thornburgh's removal and thinning of Juniper trees could save as much as 304 AF of water annually from when thinning occurred. See Exhibit B.

Comparison of Thornburgh's 2008 FWMP vs. the 2022 FWMP.

All the OWRD mitigation in the prior FWMP was surface water flows benefitting only Whychus creek from Sister to the Deschutes River and the Deschutes River between Bend to Lake Billy Chinook. Of that mitigation water 0% was groundwater (coldest), while 62% (was 13 degrees C) Deep Canyon Creek water, with the remaining 38% being warmer, (26 degrees C) surface water from COID that provides little thermal benefits. The average temperature of the 2008 mitigation was 18 degrees C. By contrast, this 2022 FWMP is comprised of roughly 84% cold groundwater (11 degrees C), and 200 AF of LeBeau surface water (20.4 degrees C) for an average of 12.5 degrees C⁷.

The current plan, like the 2008 FWMP, leaves cool water in the stream to mitigate for thermal impacts from the reductions of groundwater discharge into the river. The current plan, however, substantially increases the percentage of cool water mitigation from 62% to 84% and provides benefits into the affected streams, including Whychus and Deschutes included in the 2008 FWMP but also the Little Deschutes River, Indian Ford Creek, and the Crooked River that received no benefits in the prior FWMP.

In short, the current plan will increase summertime flows in the critical areas while at the same reducing average stream temperatures. Regardless of where the remaining 243+/- AF (1,460-1,217) of water rights or mitigation comes from this plan has already mitigated for the full impacts to seeps and springs.⁸

IV. Background and Baseline

The Thornburgh Resort (the "Resort" or "Thornburgh") will have no direct impact on natural surface waters; there are no such resources on the property and the proposed source of water for the Resort is ground water pumped from wells on the Resort property, to be appropriated under a series of water rights approved by the Oregon Water Resources Department ("OWRD"). Use of ground water by the Resort is expected to indirectly impact flows in the Deschutes River because of a determination of hydraulic connection between surface and ground waters in the Deschutes Basin. This determination was made by OWRD in connection with its evaluation and approval of Thornburgh's original water right authorizing the appropriation of 2,129 acre-feet of ground water for the Resort.

As a result of the determination of hydraulic connection, Thornburgh was required to provide mitigation to offset projected flow reductions in the "zone of impact" identified by OWRD, in

⁷ 206 AF of surface water including the 6 AF of DRC credits. Both plans have an additional 1.51 cfs (at least 106 AF) of cool 13 degree C TSID surface water.

⁸ If all 249 AF of additional water was from a surface water source the resulting % of total mitigation comprised of groundwater would be 69.2%, still greater than the 0% of groundwater and 61.7% of cool Deep Canyon water in the 2008 FWMP.

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this case the “General Zone” of impact, consistent with OWRD’s Deschutes Basin Groundwater Mitigation Program.

Separate from this mitigation and, to meet Deschutes County’s own No Net Loss standard found at DCC 18.133.070(D), Thornburgh voluntarily agreed to address both flow and water temperature concerns, which was to serve as a component of the mitigation measures for the original FWMP. Those measures are set out in Section V. Mitigation and Enhancement Measures of the FWMP. These and other measures added to the 2008 FWMP during the review of the Final Master Plan (“FMP”) were determined to fully mitigate for any negative impacts on habitat and to achieve compliance with DCC 18.113.070(D).⁹

The core component of the 2008 FWMP was adding cooler water to the river upstream of areas that were important for fish habitat. Thornburgh identified Deep Canyon Creek as a source of this cooler water, which had a temperature of approximately 13 degrees C. This water, however, has historically been pumped directly from the creek for irrigation purposes before it reached the Deschutes River. Thornburgh committed to purchasing these water rights and placing them in stream to improve flows and to cool the river.

In 2008, the use of this cool water made up just 62% of the total mitigation promised by the FWMP, but was found sufficient to fully mitigate for 100% of the thermal impacts to the Deschutes River (and to Whychus Creek as well according to Oregon Department of Fish and Wildlife (“ODFW”)) attributable to Thornburgh’s pumping. Additional impacts of 1.87 cfs¹⁰ to seeps and springs were identified in the 2008 FWMP, which planned mitigation by leaving 1.97 cfs (equal to 105% of the impacts) of the Deep Canyon water in the river upstream of areas identified as critical fish habitat. Additionally, this mitigation was determined by the ODFW to result in a net benefit to fisheries.

Project opponents objected to the 2008 FWMP, claiming that no mitigation was provided to address a slight reduction in groundwater recharge to Lower Whychus Creek. Although Thornburgh and ODFW disagreed that mitigation was needed in this location, Thornburgh volunteered to provide additional mitigation specifically for Whychus Creek by funding a part of a Three Sisters Irrigation District project. The County’s hearing officer accepted this offer. The Whychus Creek mitigation was opposed by a project opponent but proven to meet the No Net Loss standard and to provide additional benefits to habitat resources in Whychus Creek. This mitigation project has been completed.

V. Resort Water Supply and OWRD Mitigation

A. Resort Water Needs and Supply

Thornburgh’s water supply is groundwater from the General Zone of the Deschutes Basin Regional Aquifer and is pumped from numerous wells located within the Resort boundaries.

⁹ This is a Deschutes County standard only.

¹⁰ The 1.87 cfs of impact was the total amount of impact to all seeps and springs in any location (Deschutes, Whychus, etc.) from Thornburgh pumping 2,129 AF of groundwater.

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This has not changed since the Resort was first approved in 2006. The original plan anticipated 6 groundwater wells would be installed. Presently, there are 8 potential groundwater wells. However, changes to Resort infrastructure may require additional well locations to be added or moved. As was noted from David Newton in a memo dated August 24, 2021, (Exhibit C) the number or specific location of wells within the resort property has no bearing on the mitigation plan or the efficacy of mitigation to offset pumped groundwater from the Resort's property. Any well within the resort property will pump from the same regional aquifer to supply Thornburgh water for a variety of purposes, common among municipal and resort style communities in Central Oregon. Thornburgh uses to be served include domestic and commercial uses, golf course, park and landscape irrigation, reservoir/pond maintenance and fire protection. Collectively, these uses are defined by the OWRD as "quasi-municipal" uses. In 2008, the Resort's water needs at full build out were estimated at 2,129 AF per year, having consumptive use of 1,356 AF, and a maximum withdrawal rate of 9.28 cfs as shown below. As defined by OAR 690-505-0605(2), *"Consumptive use" means the Department's determination of the amount of a ground water appropriation that does not return to surface water flows in the Deschutes Basin due to transpiration, evaporation or movement to another basin.*

1. Original Water Use Full Resort Build-Out

<u>WATER USE</u>	<u>ANNUAL VOLUME</u>	<u>CONSUMPTIVE USE</u>
Golf Courses	717 AF	645 AF
Irrigation	195 AF	117 AF
Reservoir Maint	246 AF	206 AF
Other Q/M	971 AF	388 AF
TOTALS	2,129 AF	1,356 AF

Since the approval of the 2008 FWMP, issues regarding the use and conservation of water have become increasingly important to the region. As a result of this growing regional water awareness, Thornburgh has taken focused steps to reduce the Resort's water usage by roughly **one third**. This reduction of water use will be achieved by Thornburgh foregoing its right to develop some water intensive amenities and reducing irrigated landscaping for resort facilities and individual homes. The Resort will also implement the use of improvements in the type and method of fixtures used in Resort buildings. As a result of this Thornburgh is reducing its total water needs from 2,129 AF to 1,460 AF as shown in table 2 below.

The source of Thornburgh water remains groundwater from the regional aquifer to be supplied via groundwater wells located on the Thornburgh property. All the wells Thornburgh will pump from are within the boundaries of the Resort and are pumping from the same regional aquifer, the Deschutes Formation Aquifer. The location of wells within the resort have no change to the potential effects of groundwater pumping.

2. Reduced Water Use at Full Resort Build-Out

<u>WATER USE</u>	<u>ANNUAL VOLUME</u>	<u>CONSUMPTIVE USE</u>
Golf Courses	501 AF	451 AF

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Irrigation	111 AF	66 AF
Reservoir Maint	51 AF	43 AF
Other Q/M	797 AF	319 AF
TOTALS	1,460 AF	882 AF

3. OWRD Alternates to Transferring Thornburgh’s Water Rights.

Thornburgh has numerous applications, permits and other certificated water rights, as listed below for use as part of the Resort’s water plans that may be used for consumptive water or mitigation water purposes. In addition to transferring certificated water rights to the Thornburgh property, alternatively, they can be used to mitigate for pumping of groundwater reported under any groundwater permits, or Limited License. OWRD mitigation must be in the form of legally protected water for instream use which can be accomplished in different ways acceptable to OWRD, including: i) transferring existing surface water rights for irrigation use into protected instream use; and ii) voluntary cancellation of either surface or groundwater permits in lieu of mitigation. Each method results in the full amount of pumped water allowed under the certificate to be protected permanently instream. OAR Chapter 690, Division 505 (the Deschutes Basin Groundwater Mitigation Program). Thornburgh can use a surface water certificate either way but can only cancel groundwater certificates “in-lieu” to create OWRD mitigation. Regardless of the methodology for meeting the mitigation obligation, the result is similar: the authority to pump water in one location ceases and allows water to be pumped from wells at the Thornburgh property. Mitigation is discussed in detail below.

Using the certificated rights for mitigation by either cancelling the right in-lieu or transferring it instream provides at least equal benefits to streamflow and temperature as transferring the water to the Thornburgh property. Either method of providing OWRD mitigation will provide sufficient benefits to fish habitat such that there is no net loss or degradation of the resource.

4. Groundwater Permits, GW, and LL Applications:

a. Ground Water Permit G-17036 – This permit authorizes up to 9.2 cfs and 2,129 AF for Quasi-Municipal uses including irrigation of golf courses, homes and commercial areas, and maintenance of reservoirs. Period of use is Year-Round except for the seasonal limits placed on irrigation use by the permit. The rate and volume are further limited by the corresponding mitigation provided. The maximum volume for irrigation of 320 acres of golf courses shall not exceed 717 AF annually. The amount of golf course irrigation specifically under this right is limited to a diversion of 2.24 AF for each acre irrigated during the irrigation season of each year. The amount of water allowed to be used for reservoirs under this permit is 246 AF. The fully developed Mitigation Obligation for this right is 1,356 AF annually, to be provided within the General Zone of Impact. Mitigation is to be provided prior to each stage of development under the permit.

In 2013, Thornburgh posted 3.6 acre-feet of mitigation credits as the initial mitigation and the permit was issued. Due to unforeseen delays, Thornburgh was required to

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apply for an extension of the permit, which was granted in 2018 with OWRD issuing a Proposed Final Order and Final Order granting approval. Ms. Gould subsequently filed suit against OWRD at the Oregon Court of Appeals. OWRD withdrew its final order and sent the approval (as noted in the Proposed Final Order (PFO)) to a contested case hearing. On July 26, 2022, OWRD issued a superseding proposed final order proposing denial of the extension, but the permit remains non-cancelled (valid) as of the date of this 2022 FWMP. Thornburgh has protested this PFO and is seeking a contested case hearing.

Permit G-17036 is the first permit Thornburgh acquired. Due to litigation opposing the permit and the lengthy delays involved at OWRD, Thornburgh developed alternatives to pump groundwater from the Resort's wells with little reliance on this or other OWRD groundwater and limited license permits, or applications as described below.

b. Ground Water Permit Application G-19139 (pending) – This permit application was for the use of 9.28 cfs of year-round Quasi-Municipal water having the same limitations and mitigation requirements as permit G-17036. It was filed at the suggestion of OWRD staff as a potential replacement to permit G-17036 pending the contested case by Ms. Gould. The POA of this application is 8 wells located on the Thornburgh property. The application is pending. If not approved, Thornburgh will file a petition for judicial review.

c. Limited License Application LL-1879 -- This limited license application was for the use of 4.5 cfs of year-round water. The application was filed to provide preliminary use of some of the water permitted by G-17036 pending the resolution of the contested case on the extension. OWRD denied the application, and Pinnacle has filed a petition for judicial review in Deschutes County Circuit Court. If the limited license is approved, this will require mitigation for the life of the limited license, which can be done more informally than is required for permanent permits or certificates.

d. Limited License Application LL-1917 (pending) – This limited license application was for the use of 0.453 cfs of year-round water. The amount requested is the same amount of water as will be transferred under the authority of T-13703. It was filed as an alternative to the use of the water in T-13703, as a challenge to the transfer is reviewed by the court system. The application is pending. If approved, this will require mitigation for the life of the limited license, which can be done more informally than required for permanent permits or certificates.

The source of water pumped from groundwater wells located at Thornburgh is the regional aquifer residing under the Resort and throughout much of Central Oregon. The source and method of supply—or the impacts generated from withdrawal of water—does not change based upon which permit, or certificate(s) Thornburgh reports its groundwater pumping under (i.e., a transferred right, permit G-17036, or an alternate permit or certificate). OWRD rules and regulations govern the withdrawal of water from the aquifer regardless of permit or certificate number, and the impacts to that aquifer are the same regardless of the legal mechanism for withdrawal of the resource.

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B. OWRD Mitigation Requirements for New Groundwater Permits

Mitigation is required for new ground water permits in the Deschutes Basin under ORS 390.835 and related administrative rules in OAR 690-505-0500 *et seq.* This does not apply to certificated water rights that have been fully developed and need no further mitigation. The OWRD mitigation rules were adopted in response to a comprehensive study of ground water resources in the Deschutes Basin conducted by the United States Geological Survey (“USGS”) and OWRD. (*Ground Water Hydrology of the Upper Deschutes Basin, Oregon,* USGS Water Resources Investigation Report 00-4162, 2001.) The study demonstrates hydraulic connection between the regional groundwater aquifer and surface water within the Deschutes Ground Water Study Area as shown on Figure 1.

Under OWRD rules, all new ground water uses within the USGS study area are presumed to be in hydraulic connection with the Deschutes River system. The rules require mitigation to offset the impact of ground water pumping on surface water flows. In reviewing applications for new ground water rights, OWRD determines the total quantity of water to be diverted from groundwater and the amount of “consumptive use” associated with the proposed new use. The amount of mitigation required – or “mitigation obligation” – is equal to the annual amount of consumptive use.

In addition to specifying the quantity of mitigation water required to offset consumptive use, OWRD identifies the “zone of impact” or location within the surface water system in which the impact of a proposed ground water use is expected to occur. Mitigation for any new groundwater permit used by Thornburgh is required in the “General Zone of Impact” which allows mitigation water to be obtained from any source in the Deschutes Basin above the Madras gage, located below Lake Billy Chinook. The broad geographic scope of the General Zone reflects findings in the USGS Study that most ground water within the basin flows toward the confluence area of the Crooked and Deschutes Rivers and discharges into the river and tributaries in an area just above Lake Billy Chinook.

Initially, OWRD determined the consumptive use, and mitigation obligation of permit G-17036 to be 851.6 AF (40%, of 2,129 AF). Water Watch protested that determination and Thornburgh voluntarily agreed to increase the consumptive use of individual elements of the permit which raised the overall mitigation requirement to 1,356 AF. The application for the replacement permit, permit application G-19139 uses the same consumptive use rates applied by OWRD because of the settlement. Under OWRD rules, mitigation for new groundwater permits must be provided in advance for the full amount of water to be pumped under the new permit for each phase of development.

C. Thornburgh OWRD Mitigation Plan

Applicants proposing municipal or quasi-municipal water use have the option of providing mitigation in incremental units tied to specified phases of development; however, the mitigation obligation for each phase of development must be provided in full before water use may begin for that phase. Thornburgh submitted several versions of its “Incremental Mitigation Plan”

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("IMP") to OWRD as allowed by OWRD rules. Changes to the IMP may occur in the future without need for amending this plan. The IMP describes the proposed timing for meeting the mitigation obligation for Permit G-17036, developing the 2,129 AF of water uses and mitigation over several phases extending out to 2035.

Because of extensive and protracted litigation and challenges to land use and water permit and transfer applications and the delays in processing the contested case on the extension of the permit, Thornburgh developed extensive additional water resources as noted in Section B above, that can be used to comply with the No Net Loss standard. Thornburgh completed funding for the TSID mitigation that has been determined to fully mitigate for groundwater reductions projected to occur to Whychus Creek based on the water use studied by Mark Yinger that overstated the water use of the Resort. This mitigation has already been provided by TSID and is described in B.6. above.

At this point it is unclear how much water will be pumped from G-17036 or any alternate "NEW" groundwater or limited license permit.¹¹ What is clear, however, is that the Resort has agreed to reduce its water use from 2,129 AF with a consumptive use of 1,356 AF to 1,460 AF with a consumptive use of approximately 882¹² AF. More importantly, this FWMP has accounted for the maximum amount of pumping that could occur of 1,460 AF and is providing mitigation that meets or exceeds the no net loss standard. Thornburgh will be required to provide mitigation for this amount of water when due, which is before pumping consumptive water for an approved resort use. Thornburgh's maximum water use is capped to 1,460 AF, which is less than 1/100th of 1% of all current water use (approximately 750,000 AF) in the Deschutes Basin.

The certificated, fully mitigated water rights above, except for the Dutch Pacific water rights, have been or are being transferred to the Thornburgh wells. The transfers will change the place of appropriation and use. The first of these, Transfer T-13703, was approved transferring 327.5 AF of quasi-municipal water from a well in west Bend to the Thornburgh wells. The total amount of the planned transfers, including T-13703, if approved, is 1,161 AF. In the alternative the 1,161 AF of certificated water rights could be cancelled (both the groundwater and surface water rights) or transferred instream (just the surface water rights) for mitigation credits. All this water would comply with the OWRD mitigation rules if used in that manner.¹³ Certificate 89259 (2. E. above) for 49.5 AF is being cancelled in lieu of mitigation. When all the transfers or cancellations are done, Thornburgh will need to obtain a relatively small amount of additional water rights to transfer to its property or to use as mitigation. Because of the efficacy of the present plans, most critically is the fact that the 1,217 AF¹⁴ already mitigates for 119% (w/out the TSID or 198% with it) of the impacts to springs and seeps¹⁵, and that the source of remaining

¹¹ It is unnecessary to determine this at this time as the source of water must remain the same, the Deschutes Regional aquifer. DCC 18.113.070(K). However, the mitigation for impacts to habitat based upon withdrawal from that source are the subject of this document.

¹² Applying OWRD standard practice of 40% to QM permits would result in consumptive use of 584 AF. This plan provides mitigation far more than that amount.

¹³ As the basic premise of the mitigation program was to halt expansion of water use in the Deschutes basin, it cannot allow for expansion of use and must instead be permanently instream.

¹⁴ Including the DRC credit.

¹⁵ This is regardless of how the water is used. The analysis of the ratio of cool water mitigation is provided below.

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water coming from within the General Zone of Impact will not create an adverse impact on the fisheries habitat.

Of the certificated water rights described above, Thornburgh owns 1,211 AF¹⁶ that at the time of this report it is not pumping. 200 AF of that is surface water that is not being pumped from the river south of LaPine while 1,011 AF remains in the aquifer to flow to the streams, including the Deschutes River, Whychus Creek, and the Crooked River to increase flows and provide thermal benefits, long before the resort creates any impacts on the stream. This “advance” or “excess mitigation” accumulates for years until the impacts are fully felt in the stream. As is discussed in more detail below this excess mitigation accumulates to a substantial amount.¹⁷

D. Groundwater Withdrawals and Quality Mitigation

In other resort approvals, OWRD mitigation only¹⁸ was accepted as providing the entire mitigation needed to meet this standard for fish habitat. In the case of Thornburgh Resort, this standard has been redefined to require “water quality” mitigation. This was required despite the fact that all groundwater pumping in the Deschutes Basin affects groundwater discharges which impact stream flows. OWRD mitigation, by design, increases streamflow by either increasing groundwater discharge into the stream (groundwater mitigation) or by leaving water in the stream (surface water mitigation) which typically has the benefit of reducing river and creek temperatures.

Increasing streamflow is the main purpose of the OWRD mitigation program. It is also a primary purpose of many of the basin’s environmental actions and restoration programs. NCI noted this in the 2015-2017 remand of the FMP relating to TSID mitigation for Whychus Creek. Flow volumes in the upper Deschutes River are an important component of the current Habitat Conservation Plan for the Oregon Spotted Frog. Flow volume guarantees set to protect the frog have created substantial impacts on the operation of the basin’s irrigation districts and a tremendous burden on some of farmers within the basin, including North Unit Irrigation District.

Opponents of Thornburgh have typically focused on groundwater as it relates to its ability to affect streamflow, particularly the thermal conditions or “quality” of the remaining flow resulting from groundwater pumping. More specifically, opponents have focused on the location of the impacts to the area below Lower Bridge on the Deschutes River and lower Whychus Creek. However, these areas are where discharge of significant amounts of cold groundwater discharge into the Deschutes River, Crooked River and Whychus Creek, dramatically lowering stream temperatures and resulting in improved water quality.

¹⁶ The 937 AF currently left instream presently does not include the 106 AF of TSID water in Whychus Creek currently flowing from the TSID diversion to the mouth of the creek and into the Deschutes River.

¹⁷ Thornburgh may allow farmers affected by the Habitat Conservation Plan and/or drought conditions to use some portion of water it doesn’t currently need to authorize pumping on a temporary basis. When providing water for farm drought relief, that portion of Thornburgh’s water will not be instream.

¹⁸ Meaning standard mitigation credits issued in conjunction with the Deschutes Groundwater Mitigation program.

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In the original FWMP, groundwater withdrawals were mitigated for by providing surface water in the Deschutes River and its Deep Canyon Creek and Whychus Creek tributaries. In the case of the Deep Canyon Creek mitigation, surface water mitigation was justified in the 2008 FWMP because the creek itself is spring fed. While it is true that this water is cool, the surface water is heated (from approximately 11 degrees to 13 degrees) as it flows down the creek prior to discharge into the Deschutes River. In 2008, Tetra Tech's Mass Balance Analysis¹⁹ reported minor thermal impacts (temperature increases) may occur in the Deschutes River. With Thornburgh's 2008 mitigation measures, Tetra Tech's analysis estimated a temperature change of 0.00 degrees C at Lower Bridge, 0.10 degrees C at Steelhead Falls, and 0.1 degrees C below the mouth of Whychus Creek. Even though there was an 0.1 degree C increase in temperature (impact) in the critical fish habitat at Steelhead Falls and below Whychus Creek, the mitigation plan was approved as meeting the No Net Loss standard.

In the case of Whychus Creek, project opponents argued that slight groundwater withdrawals that occurred in both the upper and lower parts of the Creek impacted lower Whychus Creek. Opponents claimed it to be an area of critical fish habitat because it receives substantial cold groundwater discharges from the regional aquifer. The 2008 hearings officer expressed concerns about the creek during the peak summertime temperatures. While Thornburgh disagreed that mitigation was needed for Whychus Creek, it offered a solution to increase flows with the use of surface water. The solution was to leave 106 AF of cool mountain water in the creek from a point south of Sisters that would otherwise be pumped by TSID. The use of this TSID mitigation was challenged by a single project opponent. It was, however, approved because it was shown to achieve compliance with the No Net Loss standard based on an analysis of the impact of TSID mitigation water on temperatures in lower Whychus Creek. This mitigation also provides substantial additional thermal benefits to the middle and upper parts of the creek that were not even considered to meet the standard due to the limited scope of the review on remand. The NCI memo from October 2017 shows the maximum thermal impacts to lower Whychus Creek without mitigation, during the peak summertime temperatures and the creek at its lowest flow, to be 0.0042 degrees C. This 4/1,000^{ths} of a degree is far less than what can be measured using technology available today. **With** the TSID surface water mitigation, the temperature was **lowered** in Whychus Creek (lowered by approximately 0.001 or 1/1,000th of a degree, again in an amount too small to be measured)²⁰. Three Sisters Irrigation District has completed the project, and Thornburgh has fulfilled its agreement to provide this the water which is now instream.

While Yinger 2008 noted roughly 13% of the flow reduction impacts would be felt in the Crooked River, neither Yinger nor ODFW voiced concerns about thermal impacts there. This may be because of the large groundwater discharges in the area and the fact that the temperatures of the groundwater discharging into the Crooked River at Opal Springs and

¹⁹ Tetra Tech overstated impacts by allocating 100% of the impacts of 1,356 AF consumption into the Deschutes River which was not accurate. Yinger 2008 report stated lower % impacts, and when corrected the result is lower thermal impact.

²⁰ Since the amounts cannot be measured, they cannot be verified and are simply theoretical. As such, whether positive or negative they are considered as no change.

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Osborne are warmer (between 11.6 and 13.7 degrees C²¹) than the discharges noted into the Deschutes or Whychus (around 11 degrees C). **See Exhibit 6, OWRD Spring Temp.** Still, to better understand any thermal impacts to the Crooked River from Thornburgh pumping, Newton undertook mass balance analysis of the 2008 mitigation plans comparing that to the current 2022 plans.

In the CGE memo dated August 12, 2022, impacts to the Crooked River were analyzed based on the Yinger 2008 report using both the 2008 FWMP mitigation and Thornburgh's current plans. Both scenarios used the OWRD temp data, Yinger 2008 impacts, and recorded flows at Opal Springs and Osborne. The 2008 FWMP had no Crooked River mitigation. All mitigation was Deschutes River and Whychus Creek surface water mitigation. The 2008 plan resulted in very slight temperature increases of between 0.0001 to 0.0017 degrees C. The 2022 plan used the same inputs but included mitigation that came from the cessation of pumping BFR groundwater, some of which impacts the Crooked River. As a result, the 2022 plan results in even smaller temperature increases, ranging from between 0.0000 to 0.0004 degrees C. Although the 2008 FWMP allows more than 4 times the thermal impacts of this 2022 Plan, the thermal impacts range from between ZERO to 4/10,000^{ths} of a degree C. None of these amounts can be measured and as such are considered as no change scientifically. They have been described as having no impact on fish habitat²². Subsequent analysis was done by Four Peaks and Newton to detail the impacts on the Crooked River. The resulting thermal impacts are 0.00 degrees C at both Opal Springs and Osborne Canyon. In both cases, the resulting benefits are too small to physically measure.

E. Fish Habitat Potentially Affected by Ground Water Use

During the consultation process in 2008, ODFW identified two specific concerns with respect to potential impacts of ground water pumping on fish habitat: First, the potential for flow reduction due to hydraulic connection that could impact flows necessary for fish and wildlife resources in the Deschutes River system; and second, the potential for an increase in water temperature as a result of flow reductions from ground water pumping. In preparation for this 2022 FWMP Thornburgh discussed the changes with ODFW to understand what areas would currently be of concern. While the area from Lower Bridge to Lake Billy Chinook on the Deschutes is still important, other areas were also of concern. This included flow limitations on the Deschutes River from Bend to Lower Bridge, on Whychus Creek from Camp Polk Road upstream to Sisters, and in Indian Ford Creek, that empties into Whychus Creek. This plan takes those areas into account.

In the 2008 process, ODFW identified six species of fish that could potentially be impacted: Redband Trout, Bull Trout, Brown Trout, Mountain Whitefish, Summer Steelhead and Spring Chinook. While relevant to consider, more important is the habitat itself. In *Gould v. Deschutes County*, 233 Or App 623, 227 P3d 758 (2010) the Oregon Court of Appeals found that the no net loss standard refers to habitat, stating:

²¹ As recorded by OWRD staff and noted in Exhibit 6.

²² Tetra Tech in their 2017 report, page 8, cited the EPA 2003 report which noted that temperature changes less than 0.25 degrees C were of no consequence to fish.

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“Thus, the context of DCC 18.113.070(D) strongly suggests that “fish and wildlife resources” refers not to species of fish and wildlife, but to the habitat that supports fish and wildlife. In light of that context, we conclude that DCC 18.113.070(D) allows a focus on fish and wildlife habitat to establish that “[a]ny negative impact on fish and wildlife resources will be completely mitigated so that there is no net loss or net degradation of the resource.” That standard may be satisfied by a plan that will completely mitigate any negative impact on the habitat that supports fish and wildlife, without showing that each individual species will be maintained or replaced on a one-to-one basis.”

In its consultation with Thornburgh regarding these issues, ODFW recognized that the OWRD groundwater mitigation program was specifically designed to identify and mitigate for the impacts of flow reduction because of new groundwater pumping in the basin. Although the OWRD rules and USGS study on which the rules are based do not directly address temperature issues, ODFW also recognized that with the flow replacement required under OWRD rules the potential impact to temperature because of the Thornburgh project – or any similar individual project – is expected to be negligible. However, ODFW expressed a concern about the potential for cumulative impacts from on-going groundwater development in the basin, over time. Although cumulative impacts may be a concern, Thornburgh does not need to mitigate for the impacts of others in order to achieve compliance with the No Net Loss/Degradation standard. That standard is based solely on impacts created by Thornburgh’s pumping which were acknowledged to be negligible in 2008.

In early correspondence on this issue, ODFW identified concerns about potential impacts on cold water springs and seeps in the Whychus Creek sub-basin because of Thornburgh’s groundwater use. Following consultations with OWRD staff and the Department of Environmental Quality and their own internal review, ODFW determined the type of habitat potentially affected by the Resort in Whychus Creek would be classified, for purposes of commenting on the Resort’s FMP application, as Habitat Category 2. This conclusion was based on ODFW’s determination that temperature impacts to stream flow, if present, can be mitigated with appropriate actions. As used in the ODFW Mitigation Policy, “Habitat Category 2” describes essential habitat for a fish or wildlife species. Mitigation goals for this category of habitat, standards that do not apply to the County’s review of the FWMP, are no net loss of either habitat quantity or quality and to provide a **net benefit** of habitat quantity or quality. OAR 635-415-0025(2). ODFW reviewed the 2008 FWMP and determined that it would, without placing TSID mitigation water in Whychus Creek, offer a net benefit for fish habitat. Nonetheless, TSID mitigation water was required by the County’s hearings officer. This led to legal challenges from Annunziata Gould who claimed the mitigation water was “hot water” that would harm fish habitat in lower Whychus Creek. Ms. Gould also argued on appeal of the FMP and 2008 FWMP, without success, that temperature impacts (of .1 degree C) to the Deschutes River violated the no net loss standard.

As a result of the Gould challenges, NCI undertook extensive mass balance analysis in 2015-2017 of the impacts on Whychus Creek *without* mitigation that showed maximum thermal impacts of 0.004 degrees C in Whychus Creek under the peak summertime temperatures and the lowest

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summertime flows. It also provided an analysis of the TSID mitigation. The analysis showed that keeping water instream in upper Whychus Creek offsets the thermal impact of groundwater pumping by the resort and slightly reduces the temperature of water in lower Whychus Creek, more than 15 miles downstream²³. The NCI studies resulted in affirmance of the FWMP because it demonstrated compliance with the no net loss standard.

The principle illustrated by the results of the 2015-2017 studies – that increasing the flow of rivers and streams upstream by not diverting for irrigation use both increases volume and lowers temperatures downstream – is also adopted in this 2022 FWMP. From the point that surface water withdrawals cease and aren't being pumped from surface water and from the point where previously pumped groundwater no longer being pumped is discharged into rivers and streams, increasing flows reduce thermal impacts, which in turn lowers stream temperatures from that point of discharge on downstream.

VII. CONCLUSION

DCC 18.113.070.D requires that any negative impact on fish and wildlife resources be completely mitigated so that there is no net loss or net degradation of the resource. This Addendum to the Thornburgh Wildlife Mitigation Plan, referred to as the 2022 FWMP, amends the 2008 FWMP (as it was updated) and addresses potential impacts to fishery resources because of ground water pumping and identifies specific mitigation measures. The potential for loss of habitat due to reduced surface water flows was quantified in connection with the OWRD review of Thornburgh's application for a water right permit. Under OWRD rules, Thornburgh is required to fully mitigate for consumptive use associated with Resort development. Consumptive use represents the amount of water not otherwise returned to the Deschutes River system after initial appropriation or diversion. The OWRD mitigation program is based on estimates of impact and modeling, the program is specifically intended to replace stream flows lost due to groundwater use.

The 2008 FWMP was developed in consultation with ODFW to address two specific areas of concern regarding the potential for negative impacts: the potential for a loss of habitat due to reduced surface water flows in the impacted areas, and the potential for loss of habitat due to increased temperature from reduced stream flow or loss of inflow from springs. As part of the development of this plan, discussions with ODFW took place to understand the current priorities to ODFW to protect species and related habitat. While the area of the Deschutes River from Lower Bridge to Lake Billy Chinook remained important to ODFW, other issues presented concerns to the agency. ODFW expressed concern with limited flows of the Deschutes River between Bend and the Lower Bridge area, and of Whychus Creek between Sisters and Camp Polk Road and in Indian Ford Creek. Also important to ODFW was the distance in the stream the mitigation change will improve, as longer stream reaches are better.

As described above this 2022 FWMP has numerous sources providing benefits and mitigation, several that provide benefits over a significant distance, including areas of concern to ODFW.

²³ The TSID mitigation reduced temperatures slightly throughout Whychus Creek starting from the TSID diversion where the water was left in stream.

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For example: 1) the LeBeau water increases flow in the Deschutes River for 137.7 miles; 2) The Tree Farm water is cold groundwater discharges that increase flows in the Deschutes River from Bend downstream through the stretch of concern to ODFW and onto the lake; 3) The Dutch Pacific water is benefitting Indian Ford Creek and Whychus Creek around Sisters to the mouth; 4) TSID water adds cool surface water above Sisters to the mouth of Whychus Creek at the Deschutes River. All of these sources increase flows that add to the thermal mass which in turn reduces temperatures in their respective stream and river reaches, ultimately providing benefits down to Lake Billy Chinook.

The potential for an increase in stream temperature resulting in a negative impact to fish and wildlife resources was also evaluated. Regarding Whychus Creek, the TSID water was shown to fully mitigate any potential peak temperature impact and lower the stream temperatures in not only Lower Whychus Creek, but throughout Whychus Creek to the mouth, which includes the area of concern to ODFW. Increasing the groundwater discharges from the Dutch Pacific water will further increase the reduction in temperature and the thermal benefits being provided to Whychus Creek.

Regarding the Deschutes River, the 2008 FWMP increased flows between Bend and Lake Billy Chinook by adding warmer surface water in Bend and cooler surface water from Lower Bridge to Lake Billy Chinook. These additions resulted in temperature change of 0 degrees C above Lower Bridge down towards Steelhead Falls, and an increase in the temperature of 0.1 degrees C at Steelhead Falls to below Whychus Creek. Even with those slight increases in temperature providing cool water mitigation equal to 105% of the impacts to seeps and springs fully mitigated for any reduction in groundwater. Increasing the percentage of benefits to seeps and springs coming from cool water sources (includes groundwater, Deep Canyon Water, TSID water) to 195% presently from 155% in the 2008 FWMP naturally provides far greater benefits than previously approved.

In developing recommendations for this plan, it was clear any potential change in stream temperature attributable to Thornburgh's proposed ground water use under steady state conditions, whether positive or negative, would be at levels not measurable with available equipment and technology. Although the changes being discussed will, in almost all cases, result in an increase in stream flows and a reduction in stream temperatures, they are not significant enough to result in any quantifiable negative impact to fish habitat at any time. However, the massive influx of excess flows provided during the transient period will further increase stream flows and further lower temperatures in all the affected reaches for decades into the future as the actual impacts to stream flows gradually increase from Thornburgh's groundwater pumping until steady state conditions are attained.

By committing to fully utilize the water sources as described herein, and to comply with the conditions of this 2022 FWMP, any potential negative impacts to fish habitat resources because of the Thornburgh Resort development will be completely mitigated such that there is no net loss or degradation of habitat quantity or quality. In fact, it will likely provide a slight net benefit when steady state conditions are achieved many decades from now. During the transient period, Thornburgh will provide significant additional benefits to the quantity and quality of fish

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and aquatic habitat. As such this 2022 FWMP will exceed the no net loss/degradation standard set by DCC 18.113.070(D).