

June 3, 2026

To: City of Ketchum Planning & Zoning Commission

Re: Rusack Floodplain Development Permit / Stream Alteration – 411 Northwood Way,  
P24-038

Hearing Date: June 4, 2026

Dear Chair Carter and Members of the Planning and Zoning Commission,

Project Big Wood appreciates the opportunity to comment on the Rusack stream alteration proposal at 411 Northwood Way. We recognize that this is a difficult site and that the applicant is responding to real erosion concerns near existing development. We also appreciate that the revised design now includes a constructed riffle, rock/wood barbs, willow plantings, a no-pesticide boundary, monitoring, and some incorporation of large wood.

PBW does not oppose thoughtful property protection where homes are at risk. However, Ketchum's stream alteration criteria require more than private property protection alone. The City must also evaluate whether the project preserves or restores the river, floodplain, and riparian zone; avoids negative impacts to aquatic life, recreation, and water quality; creates a stable condition; maintains or improves fish habitat; and serves the local public interest.

The revised project is an improvement over the prior submittal, but PBW remains concerned that the design still relies heavily on hardening and engineered channel control, while missing a larger opportunity to work with the side channel and floodplain dynamics of this reach.

PBW partially funded and continues to support the "Northwoods Concept Design", which was developed specifically to guide more sustainable, river-friendly solutions in this reach. That concept emphasizes large wood, floodplain benches, vegetated roughness, side-channel connectivity, and coordinated multi-property restoration as alternatives to isolated bank hardening. In PBW's prior comments on the immediately downstream Swan project, we encouraged the City to use the Northwoods Concept as the guiding framework for this reach and to prioritize bioengineered, wood-based stabilization over rock, geogrid, and localized property-level interventions.

PBW recommends that any approval be conditioned on the following:

- 1. Require a clearer alternatives analysis based on the Northwoods Concept.**

The Commission should ask whether the project can better reduce erosive energy by spreading water across the side channel/floodplain system, increasing

roughness, and using engineered wood structures rather than relying primarily on rock, a constructed riffle, and hardened bank treatment. The Northwoods Concept identifies reach-scale strategies such as apex jams, bank deflector structures, floodplain roughness wood, biorevetments with planted berms, and beaver mimicry style treatments. Those approaches appear directly relevant here.

**2. Ask for more detail on the proposed riffle.**

PBW recommends that the City require the applicant to explain the purpose, quantity of rock, rock sizing, expected grade-control function, and long-term stability of the constructed riffle. If the intent is to reduce grade, slow velocity, or influence flow split, that should be clearly stated and supported. We are concerned that 18-inch rock may not be durable in Big Wood River flood conditions and that constructed rock features may fail, mobilize, or require future maintenance unless they are very carefully designed.

**3. Reduce hardening and increase bioengineering.**

PBW remains concerned about the amount of hard bank treatment proposed. The Northwoods Concept shows that this reach can be approached through wood, floodplain roughness, side-channel engagement, and vegetated stabilization rather than simply holding a private bank in place. In the prior Swan comments, PBW specifically recommended replacing rock/geogrid-style stabilization with rootwad revetments, live cribwalls, willow lifts, vegetated terraces, or large-wood deflector structures. Similar direction is appropriate here.

**4. Clarify the side-channel strategy.**

The application appears to focus on keeping more flow in the main channel while relocating woody debris. PBW recommends that the City ask whether this is the best long-term strategy. If erosion and high velocity are the core problems, the project should explain why it does not use the side channel more dynamically to spread flow, reduce erosive energy, improve floodplain connection, and create habitat complexity. Simply relocating wood and hardening the bank may miss the larger restoration opportunity.

**5. Require stronger riparian restoration and prohibit replacement sod in disturbed riparian areas.**

PBW is particularly concerned that construction disturbance may be followed by replacement of sod near the river. Replanting lawn in the riparian edge repeats the condition that contributed to this problem: limited root structure, limited roughness,

limited shade, and little habitat value. PBW's prior Rusack comments noted that mature trees and riparian vegetation had been lost in this area and encouraged a more robust planting plan that removes sod within the buffer. Any disturbed area within the riparian/floodplain edge should be restored with native grasses, shrubs, willows, cottonwoods where feasible, and other deep-rooted native vegetation — not sod.

**6. Require clearer fish habitat findings.**

The City should require a specific finding that fish habitat will be maintained or improved, not merely that the project will avoid a rise in flood elevations. PBW's prior comments cited the Big Wood River Atlas for the concern that riprap and simplified banks reduce trout habitat, while large wood, edge complexity, and forested riparian areas are critical to habitat quality.

**7. Require monitoring, as-builts, and adaptive management.**

PBW recommends requiring as-built plans, photo points, post-runoff inspections, vegetation survival reports, and adaptive management if the project causes unintended scour, sediment deposition, plant failure, loss of habitat complexity, or future maintenance needs. Future in-channel work, rock placement, channel grading, or debris removal should remain subject to City review.

PBW supports a collaborative path forward. This reach is complicated, and the applicant's concerns are real. But the Big Wood River is also a public ecological resource, a fishery, and a defining feature of Ketchum's community character. Stream alteration permits should move private stabilization projects toward better river function wherever possible.

For these reasons, PBW recommends that the Commission require additional revisions or condition approval on a stronger alternatives analysis, reduced hardening, expanded bioengineering, native riparian restoration, monitoring, and adaptive management package.

With Gratitude,

*Amanda Bannan and the team at Project Big Wood*

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