



4th of July Fireworks –
After Action Report

2023

Robert Womack (Planning Section Chief)
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CONTENTS

EXPLANATION OF TERMS	3
INTRODUCTION	4
AFTER ACTION REPORT OVERVIEW	4
STRENGTHS.....	8
AREAS OF IMPROVEMENT	8
RECOMMENDATIONS	9
CONCLUSION AND NEXT STEPS	10

EXPLANATION OF TERMS

Examples:

AAR	After Action Report
BC	Battalion Chief
CFS	Calls For Service
CHP	California Highway Patrol
CSP	California State Parks
EOP	Emergency Operations Plan
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
MCI	Mass Casualty Incident
NCSD	Northstar Community Services District (transportation buses)
NCSO	Nevada County Sheriff's Office
NIMS	National Incident Management System
OEM	Office of Emergency Management
OSC	Operation Section Chief
PIO	Public Information Officer
PSC	Planning Section Chief
SCSO	Sierra County Sheriff's Office
TDRPD	Truckee Donner Recreation and Park District
TOT	Town of Truckee
TPD	Truckee Police Department (Town)
TFPD	Truckee Fire Protection District

INTRODUCTION

On 07/04/2023 the Truckee Donner Recreation and Park District hosted their annual West End Beach 4th of July fireworks show. This show has been held annually since 1985, with an exception when it was canceled for 3 years beginning in 1999 after a near riot occurred on the beach and again for 2 years beginning in 2020 due to Covid. The event has been estimated to attract more than 15,000 people to the west end area of Donner Lake to view the fireworks after a day of beach festivities. This is in addition to nearly 100% occupancy of the residential areas surrounding the Donner Lake area. In 2023 concerns were raised by the Town about ingress and egress of spectators, emergency response for 1st responders, and evacuation in the event of a major incident in the west end area.

Sequence of events:

0900 – West End Beach (TDRPD) opens for business

1700 – Briefing of 1st Responders and Allied Agencies at Command Post

2130 – traffic control devices are set-up

2130 – Fireworks display begins

2152 – Fireworks display ends and egress begins

2245 – east end (Coldstream Roundabout) traffic is cleared

2300 – west end traffic returns to normal

AFTER ACTION REPORT OVERVIEW

This report is a compilation of information from the agencies and staff who participated in the 2023 4th of July Fireworks display. The information was gathered by Robert Womack – Town of Truckee Emergency Manager and was provided by representatives from Truckee Fire Protection District, California Highway Patrol, Town of Truckee staff, and other cooperating agencies. Additionally, traffic counts were conducted, and the required post fireworks report was incorporated where appropriate. Recommendations in this AAR should be viewed with considerable attention to the need to provide appropriate 1st responder safety, emergency access, public safety, and appropriate ingress and egress of spectators during this event.

Incident Overview:

On 07/04/2023 the Truckee Donner Recreation and Park District (TDRPD) hosted their annual West End Beach 4th of July fireworks show. This show has been held annually since 1985, with an exception when it was canceled for 3 years beginning in 1999 after a near riot occurred on the beach and again for 2 years beginning in 2020 due to Covid. It is important to note this event is hosted by the Truckee Donner Recreation and Park District at their West End Beach facility where the actual fireworks display is launched from, however the event impacts the entire Donner Lake area, particularly the west end residential area. This event is held under the authority of a Special Event permit granted by the Town of Truckee pursuant to the Special Events Municipal Code ordinance.

TDRPD sells a maximum of 5,000 tickets to the event at the West End beach itself. These tickets require proof of residency or ownership within the TDRPD district to be purchased. Approximately 3,700 tickets were sold for this event, which is normal for weekday events. No issues were noted on the public beach that required outside agency assistance. The Rec District allows alcohol to be brought in for the event by beach goers but prohibits common containers (kegs) and does not sell alcohol at the event. They do sell food through community organizations. They have a full staff of lifeguards and supervisors / managers at the event.

In years past, attendance for the Fireworks Display has been estimated at 15,000 people. However, this estimation was anecdotal as there have been no official counts conducted. Overall attendance this year in the Donner Lake area appeared to be down from previous years based on observations and comparisons to prior years. In response to concerns, this year traffic counts were conducted using a variety of means (hand count, radar count, and license plate readers). In order to be as conservative as possible, we only counted Coldstream and Donner Lake Rd. (we did a get count of 3,800 vehicles at DPR and the Boat Ramp for the full day). This means there were at least 2,500 vehicles that left the Donner Lake area (1,500 + 1,000 = 2,500). For AAR purposes, each vehicle is estimated to carry 4 people (this is based on actual observations and is an average as many vehicles had many more people in them), meaning there were approximately 10,000 spectators in private vehicles. There were approximately 1,100 riders that used the transit service (total passenger trips – approximately 550 each way). This means conservatively there were approximately 10,500 spectators in the area (not including bicycle and pedestrian traffic). Sewer flows were used to estimate residential population. Previous years estimates have put this population at just under 6,000 people, however that is based on 2.3 persons per unit, likely also low for this time-period based on observations. If the number of persons per unit is increased to 4, this changes the residential population to just under 10,000, still conservative based on observations, but likely more accurate. Conservatively, population estimates for 2023 are at least 20,500 people (spectators and residents) with at least 2,500 vehicles using the road during this event (not counting vehicles at residences that stay parked).

The fireworks display lasted 22 minutes. The pyrotechnics company has submitted a report describing no unusual incidents with the show, however the grand finale detonated at a very low level that scattered fall-out over the transport vehicles and surrounding vegetation in the launch area. Stand-by fire personnel were also underneath the fall-out but protected by PPE. The pyrotechnics company noted the fall-out from this was within the noted pre-plan fall-out area and that it was not unusual to have low level loads based on manufacturing issues. This follows an incident last year (2022) where a launch rack came loose and 5 rounds were launched and detonated over the west end residential area, well outside the lake fall-out area. It was also noted that a paddle boarder entered the exclusion zone just prior to the start of the display and there is heavy vegetation in much of the fall-out zone that is on land including brush and large pine trees. There were illegal fireworks noted in the area of the Summit Creek bridge on South Shore Dr after the event. This is a safety issue with exiting patrons using this area at the

same time. There were also sporadic illegal fireworks in the neighborhoods and along the Donner Lake shoreline near mid lake.

This event requires extensive staffing by local law enforcement agencies. In years past, Truckee Police Department (TPD) has staffed this event with a mixture of on-duty, overtime, and mutual aid requests. This year TPD had six units assigned to neighborhood patrol in teams of 2, two units assigned to motorcycle patrol, 2 units assigned to boat patrol (single boat), a Community Service Officer, an Incident Commander (Lieutenant), and Operations Section Chief (Sergeant). In years past, Nevada County Sheriff's Office (NCSO), California High Patrol (CHP), and California State Parks (CSP) have supplied personnel primarily to handle traffic control, with some additional staffing for security and boat patrol. In response to a mutual aid request this year, Sierra County Sheriff's Office (SCSO) provided 2 wave-runner personal watercraft to assist with boating issues on Donner Lake. This year NCSO was unable to provide their requested boat due to the need for it on the Boca Reservoir. Also, this year CHP provided personnel for traffic control with CSP and NCSO personnel handling their respective jurisdictions. For reference, CHP handled 75 Calls for Service in the Truckee area on the 4th which is about twice the normal for this day. TPD handled 40 Calls for Service in the Donner Lake area, which included among other calls, 10 boating stops, 10 subject stops (primarily related to alcohol violations), 13 traffic enforcement stops (2 vehicles towed). There were 17 Town Calls for Service during the fireworks event including a felony DUI, unfounded kidnapping, and 2 attempted suicides. Of note, there was a request for assistance at the TDRPD public Boat Ramp due to illegally parked vehicles. This was just prior to the start of the fireworks show and was handled as "beat information" only (no response by patrol staff) due to staffing issues at this moment.

This year, the focus continued to be to use a licensed traffic control company to conduct post event egress traffic control freeing up law enforcement personnel to focus on prevention and response to incidents within the event. In order to facilitate traffic leaving the event, Donner Pass Rd from Donner Lake Rd. west to the west side of Donner Lake Village is set-up with 2 lanes westbound and 1 lane eastbound using traffic cones. One of the westbound lanes is forced onto Donner Lake Rd to I-80 and the other is allowed to go straight westbound on Donner Pass Rd. CHP provided traffic control at the Coldstream Roundabout and the DLI/I-80 interchange with the traffic control company providing traffic control on Donner Pass Rd at South Shore Dr and Donner Lake Rd., along with the set-up of devices. Parking continued to be an issue with vehicles parking in No Parking zones on Donner Pass Rd. and Donner Lake Rd. Also, due to a rock slide, westbound Old 40 was closed west of the Town limits to all traffic, removing it as an emergency evacuation route and also as a possible spectator egress route.

For the first time this year, mass transit was tried utilizing 5 buses under contract from Northstar Community Services District (NCSD) to shuttle spectators from the High School to the west end beach area. Ridership was estimated at just slightly over 1,100 people (550 one way) which likely resulted in 150-200 less vehicles in the area. Due to illegal parking in the No Parking zones on Donner Pass Rd. at South Shore Dr., the buses had to execute a 3 point turn on Donner Pass Rd., which was accomplished with minimal difficulty, but is not an optimal solution.

Truckee Fire Protection District (TFPD) provided an engine, medic unit, and their side-by-side Ranger for response to incidents within the event's Donner Lake perimeter. These units are staffed with on-duty personnel and subject to call-out for other incidents in the district. TFPD provided a dedicated Battalion Chief to the event and the TFPD Fire Marshal (BC) was assigned to the fireworks display. Cal-Fire provided an engine at the fireworks launch site, also subject to call-out and draw down in the event of a need. The USFS provided an engine for the event which was located west of the closure on Donner Pass Rd., west of town limits. None of these fire resources are guaranteed (other than the Battalion Chiefs). The Mass Casualty Incident (MCI) trailer was originally scheduled to be at the CP, however TFPD

repositioned it to Station #92 for better district coverage. While these resources were not called away, prior years have resulted in medical calls requiring significant response (cardiac event, severe dog bite, skateboard accident, bike vs pedestrian fatality, etc.).

Duration:

July 4th, 2023, from 0900-2359 hours. Actual fireworks ran from 2130 hours to 2152 hours.

Focus (Check appropriate area(s) below):

- Prevention
- Response
- Recovery
- Other

Activity or Scenario (Check appropriate area(s) below):

- Fire
- Severe Weather
- Evacuation
- Special Event
- Other

Location:

Donner Lake – West End Beach and surrounding neighborhoods.

Participating Organizations:

Town of Truckee

Police Department, Special Events Program, Emergency Management

Truckee Fire Protection District

California Highway Patrol

Nevada County Sheriff's Office

Sierra County Sheriff's Office (mutual aid request)

California State Parks

Truckee Donner Recreation and Park District

Northstar Community Services District (buses)

Nevada Barricade (traffic control contractor)

STRENGTHS

1. Pre-planning meetings and coordination of agencies addressed many issues ahead of time and allowed for better event
2. State Parks conducted vegetation management on the east end of the park on the roadway leading from South Shore Dr to the park for better emergency vehicle ingress.
3. Coldstream Roundabout flowed well and was the best it has ever been according to CHP personnel
4. West End traffic plan worked well to exit vehicles within about 1 hour of the end of the fireworks display
5. Approximately 1,100 passengers rode the shuttle buses. Transit cleared by 22:45 hours from the west end
6. With the addition of the transport officer and reallocation of CHP officers from Coldstream to DLI, law enforcement staffing appeared adequate for weekday events
7. Having a dedicated Regional Dispatch Center dispatcher was a benefit not only to the event, but to the rest of the county
8. The TDRPD West End beach continues to be well managed with little or no issues requiring law enforcement or EMS response

AREAS OF IMPROVEMENT

1. Parking issues on Donner Pass Rd. and South Shore Dr in the bus turn around area
2. Parking issues on Donner Lake Rd. between Cedar Dr and Donner Pass Rd
3. Parking issues on east end of Donner Lake (Donner Pass Rd & Coldstream)
4. Parking issues alongside roadways in the residential areas would make access for fire apparatus difficult if not impossible
5. Buses were delayed on turn around due to Donner Lake Rd. parking issues
6. Increase transit ridership where possible by prioritizing numbers of buses and trip turn around times
7. Issues with W/B Donner Pass Rd at Donnergate and traffic back-up for vehicles trying to enter the Donner Lake area
8. 3 lanes of traffic on Donner Pass Rd. creates a safety issue for pedestrians exiting the event to parked vehicles
9. Have either NCSO for prisoner transport or dedicate single officer to this rather than tie-up a 2 person neighborhood patrol unit
10. IAP needs the traffic diagram and exclusion zone map in the actual plan
11. Enforce fireworks fall-out exclusion zone and be prepared for potential ignitions in the fall-out zone

RECOMMENDATIONS

1. *Reduce to 1 CHP officer for ramp closure only at Coldstream Roundabout*
2. *Add 1 CHP officer to DLI / I-80 intersection to manage transit buses through the closure while other 2 CHP officers manage ramp closures*
3. *Have medical staffing at the TDRPD West End Beach in accordance with the Truckee Fire Protection District matrix of emergency medical services resources for expected beach attendance*
4. *Fire and EMS staffing for the event at the CP should follow the recommended TFPD matrix of emergency medical services resources for the expected spectator population for the entire west end of Donner Lake area using same on-duty times as Law Enforcement personnel to ensure the best possible initial response times*
5. *Fire staffing at the launch site during the fireworks display should follow requirements outlined in the TFPD Fireworks Display Application including the cancellation of the event if a fire engine or personnel coverage are unable to be committed to the event.*
6. *Strengthen No Parking zone on Donner Lake Rd from Cedar Point to Donner Pass Rd (both sides) and I-80 ramps at Donner Lake Rd. with better barricade, signage (with appropriate times), and flagging tape*
7. *Maintain Law Enforcement as currently staffed with this as the minimum level for weekday events, but add a NCSO transport officer or dedicated TPD officer for prisoner transports to avoid tying up neighborhood patrol teams on transports*
8. *Encourage bike valet at High School for increased safety at conclusion of the event*
9. *Prioritize mass transit to increase ridership, improve on time performance, and reduce points of conflict thereby reducing vehicle trips and traffic back-ups.*
10. *Stage additional buses for egress to reduce turnaround times and more efficiently move ridership out of the venue*
11. *In order to prioritize transit usage and pedestrian safety at the end of the event, Donner Pass Rd. from Donner Lake Rd to South Shore Dr should be no parking on both sides of the roadway to allow a pedestrian walkway and transit bus access and staging*
12. *Increase pre-event public messaging on traffic plan and alternative transportation*
13. *Increase parking enforcement earlier in the day to reduce problem before it starts where possible both in the west end area and bike lanes throughout the lake area*
14. *Ensure traffic cone pattern for 2 lane westbound Donner Pass Rd. starts at the westside of Donner Lake Village where there is room for this to occur*
15. *Make sure IAP includes traffic diagrams and exclusion zone maps*
16. *Enforce the exclusion zone appropriately, including moving spectators on the private beach out of the fall-out zone. Perform appropriate vegetation management in the fall-out zone to reduce the potential of ignition from low level detonations.*

COSTS

Total cost to the Town was \$50,478 for mitigation, private traffic control, and staff time (regular and overtime) for the event of which \$22,846 will be invoiced to the TDRPD.

The Town spent \$15,175 on private traffic control for the fireworks event at Donner Lake during the event itself (pre-event No Parking signage and barricade placement was handled by on-duty Public Works staff) which will be invoiced to the TDRPD.

Town staff contributed 462.25 hours to planning the efforts and staffing the events, including pre-event No Parking signage and barricade placement, police services at Donner Lake, parking enforcement in the no parking zones around Donner Lake, Transportation staff ensuring the shuttles operated smoothly, and emergency services creating evacuation plans prior to the event. The average hourly rate of \$54.35 for staff time was for the mix of regular and overtime hours that were worked. In total, the staffing hours for this effort resulted in \$16,045 in staff time not charged to the TDRPD and \$9,008 that will be invoiced to TDRPD for day of event staffing.

4th of July Fiscal Impact Table			
	Town Costs	TDRPD Invoice	Total Costs
Town Labor Cost - Not Charged To TDRPD	\$16,045		\$16,045
Town PD Costs Charged to TDRPD		\$9,008	\$9,008
Traffic Control - Contractor		\$15,175	\$15,175
West End Beach Shuttle – Contractor	\$3,752		\$3,752
Advertising/Outreach	\$4,713		\$4,713
Misc. Expense - Printing	\$448		\$448
Port-a-potties – Paid for by TDRPD	\$1,337	-\$1,337	\$1,337
Total	\$ 26,295.09	\$22,846	\$50,478

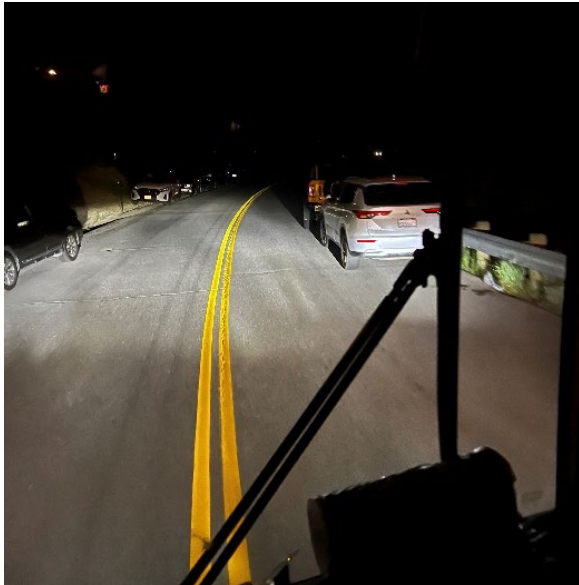
CONCLUSION AND NEXT STEPS

The West End 4th of July Fireworks display has been a positive community experience and 2023 continued this trend. While the actual estimated attendance appears to be higher than originally believed in pre-planning meetings, there have been limited law, fire, and EMS incidents during the event in recent years. Some of the past incidents have included a traffic fatality, major medical calls, law enforcement issues, and others that have been handled by event personnel without the need for outside assistance. With that being said, some community members are unhappy with the influx of spectators and the potential overuse of the area and continued success of this event will need to address those concerns with adequate mitigations.

Additionally, the potential exists for an incident within the event that would quickly overwhelm response agencies with little chance of timely assistance coming from out of the area. Something like an immediate evacuation due to a fire or criminal event could not only overwhelm event staff, but could create a gridlock condition and the inability to get response agencies into the area. Conversations

among the agencies involved in this event need to continue going forward to address the potential issues considering best practices for staffing and planning to respond to a potential large-scale incident during an event of this size.

EVENT PHOTOS



S/B (downhill) Donner Lake Rd at Guardrail



Transit impeded by uncontrolled pedestrian access and movements



Transit at capacity on egress at DPR and South Shore Drive



South Shore Dr
(vehicle over the edge and abandoned while parking)



Parking at Fir St and South Shore Dr (entrance to DLPOA Beach). Roadway widths are narrowed on South Shore, but passable until pedestrians are walking – Fir St is single lane only, likely too narrow for fire apparatus.



Non roadway legal vehicles (often with unlicensed drivers) with unsafe riders were common throughout the west end residential area



Over-all aerial photo of TDRPD West End Beach



Over-all aerial photo of DLPOA Beach



Low mortar detonation during grand finale – magenta is where fall-out landed on vehicles and vegetation – *note fall-out zone on private beach area*