

## Project Description- Desolation Trail Reroute: Bridge Purchase

The heavily used and popular section of the Desolation trail going from Mill D North trail head to Dog Lake has an extended section of steep, eroding tread that negatively impacts natural resources and recreation experience. The Salt Lake Ranger District, working with Salt Lake County, Trails Utah, Salt Lake Valley Trails Society and hopefully the Central Wasatch Commission, aims to replace this problematic trail section by rerouting the trail with sustainable grade tread.

### Current situation:

The section of Desolation Trail going south and downhill from Dog Lake was built unsustainably. Over a half mile of trail averages 19% grade, with sections at 35% grade, and the trail goes directly down the fall line instead of using side-slope. The result is erosion, exposure of rocks and roots, channeling water on the trail, and widening of the tread. This current situation is bad for water quality in this area managed for municipal water supply. It is bad for vegetation, as the trail continues to widen and erode. Most noticeably, it is bad for recreation. Water has caused a deep erosion rut in the middle of this shared use trail. The steep grade and the erosion rut makes for a dangerous situation with mountain bike riders coming downhill with hikers coming up.

The Salt Lake Ranger District has an approved plan to reroute the trail with 0.65 miles of new trail including several switchbacks. This will eliminate the fall line trail section and reduce the trail grade from an average of 19% down to a sustainable 8%. The NEPA review has been completed and the trail alignment is flagged for construction. Stream alteration permits are approved. Initial funding was obtained from Salt Lake County and a Recreational Trails Program grant.

### Immediate need:

The final trail design found that the rerouted trail must cross back and forth over a ravine coming off of the east side of Reynolds Peak. This unexpected design change requires two significant bridges over the ravine not included in the original cost estimate. Bids for the prefabricated bridge materials came in at \$21,135. The USFS can assemble the bridges on site within their project contingency.

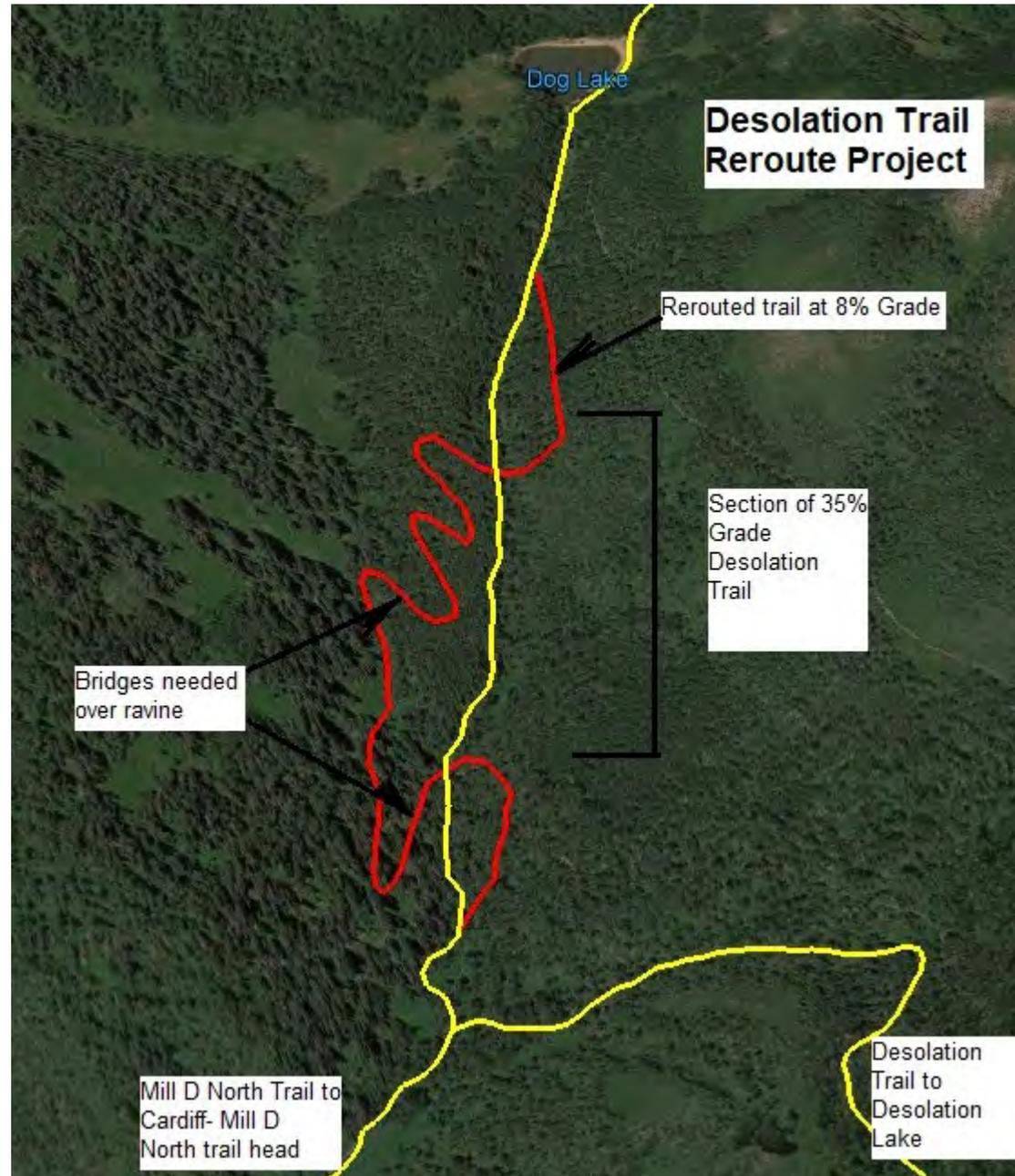
Without additional funding this project can not be completed this summer as planned. The project is otherwise ready for construction. The prefabricated bridge materials should take 8 weeks to be delivered on site after the order is placed.

### Project Budget:

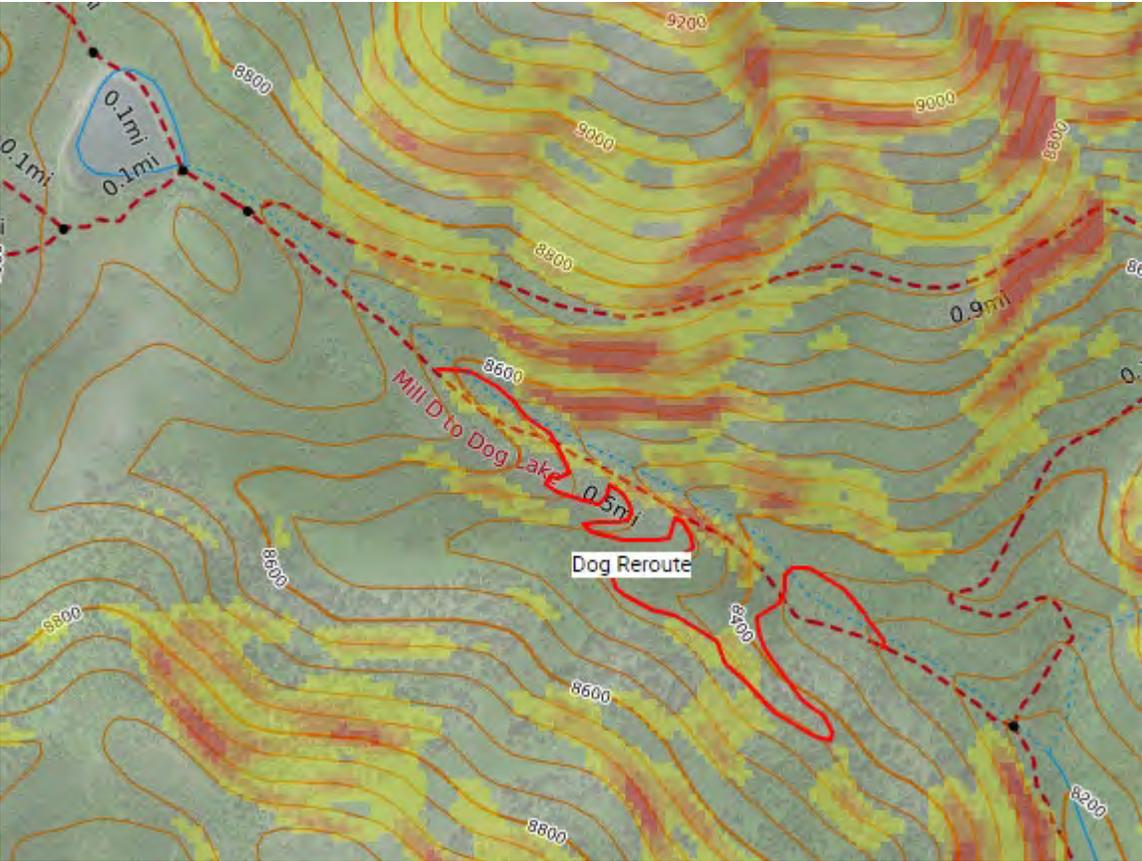
There's broad funding support for Dog Lake reroute and bridge project:

o Salt Lake County Parks & Recreation bond money, agreement with USFS:	\$25,000
o Recreational Trail Program grant awarded to USFS:	\$20,000
o USFS appropriated funds:	\$ 6,360
o Volunteer In-Kind commitments from Salt Lake Valley Trails Society, CCF:	\$ 8,000
o CWC support for Bridge Materials:	<u>\$20,000</u>
	\$79,360

This is a view of the project area looking north up the Mill D North drainage from Big Cottonwood Canyon towards Dog Lake.



Dog Lake is frequently accessed by bikes from the Wasatch Crest and Millcreek Trails, but the check-steps and erosion on the trail toward Mill D trailhead is hard for bikers, hikers, and watershed. With sustainable and bike-able grades, this 0.65 reroute will improve connectivity and access.





Photos show erosion. Inclinometer measured grades of 35% for multiple sections. Average over the entire rerouted section is 19% grade, average over reroute is 8%.



# PERMAPOST

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3/20/2020

Permapost Products is a woman owned small business specializing in wood prefabrication and preservative treating with more than 61 years of experience in similar projects offering the following material costs:

Includes: sills, stringers, backing planks, stiffeners, deck planks, curb blocks, curb rails, hardware and fabrication.

Delivered to: 6944 S 3000 E Salt Lake, Utah 84121

**Total 2.57 M bd ft. of lumber materials**

16' long solid sawn stringer bridge with curbs	\$ 8,537.70
20' long solid sawn stringer bridge with curbs	\$ 9,797.34
Freight (includes both bridges)	\$ 2,800.00
<b>Total</b>	<b>\$ 21,135.04</b>

The following notes apply:

1. All sills, backing boards, stiffeners materials are GRN DF #1/BTR FSR FOHC and incised. Treated with Pentachlorophenol to a net retention of 0.50 pcf (meeting AWPA UC4B) using solvent type A in heavy oil.
2. All stringers deck planks, curb blocks, curb rails materials are KD DF #1/BTR FSR FOHC and incised. Treated with Pentachlorophenol to a net retention of 0.50 pcf (meeting AWPA UC3B) using solvent type C in light oil.
3. This pricing includes BMP and Independent Inspection.
4. Machine bolts, timber bolts, nuts, washers, malleable iron washers, nails are included. All galvanized steel.
5. No gabions, geocell or running planks in bid.
6. One gallon of field treatment per bridge.
7. Fabrication for assembly is included in this bid.
8. Shop drawings will be provided for your review and approval, starting after receipt of contract.
9. Pricing Net 20 days ADI using SAM system for payment.
10. Shipment is currently approximately 6-8 weeks after approved shop drawings.
11. These costs are FOB a single drop to Salt Lake, UT for your unloading, providing a flatbed semi-truck can safely reach the site and turn around. If this is not possible you will have to unload the truck off site and move the material on your equipment. One-hour time is included for unloading. Any additional time may be billed at \$75.00 per hour.
12. All sales are subject to our agreement on terms of sale.
13. Sales tax is **NOT** included and will be added if required.

Please contact me with any questions or concerns.

Thank you,



Bruce Lipps  
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503-619-0212 or 800-828-0222, Fx 503-648-8383



File Code: 2300  
Date: April 20, 2020

Central Wasatch Commission  
Short-Term Projects Committee

Dear Central Wasatch Commission,

The Salt Lake Ranger District fully supports John Knoblock's application to the Central Wasatch Commission to purchase two bridges for the Dog Lake reroute. These bridges are the linchpin in a project that is important, visible, and poised for implementation.

In 2020, the Salt Lake Ranger District will re-route a section of steep and eroded trail by which hikers access Dog Lake from Big Cottonwood Canyon. The new construction—a sustainable trail that will wind through aspen hillside rather than climbing directly up a gully— involves installation of two new timber bridges. Labor for tread and bridge construction is already paid for through grants, but the bridge materials are not.

Thus, support from the Central Wasatch Commission is both critical and well-timed. The Salt Lake Ranger District is already deeply committed to the success of this project. We've flagged the alignment, completed NEPA analysis, received approval for our 404/stream alteration permits, and involved engineers in bridge design. The Recreation Trails Program and Salt Lake County have awarded funding for the new trail, and both Cottonwood Canyons Foundation and the Salt Lake Valley Trails Society have committed substantial volunteer support. If the Central Wasatch Commission purchases bridge materials, they will become equal partners in a broadly supported project that models shared stewardship.

We strongly recommend this project be funded in full, and are excited for the recreational opportunities it will provide. Questions regarding the project can be directed to Trails and Wilderness Program Manager Zinnia Wilson at 385-377-2107 or [zinnia.wilson@usda.gov](mailto:zinnia.wilson@usda.gov).

Thank you for your consideration,

*Original signed by R. Hotze*

Rebecca Hotze  
District Ranger

