

ID: 08-W-12ID
The Council of State Governments
2008 Innovations Awards Program



Henry's Lake Fish Passages Project

Submitted by
Idaho Transportation Department
February 2008

2008 Innovations Awards Program APPLICATION

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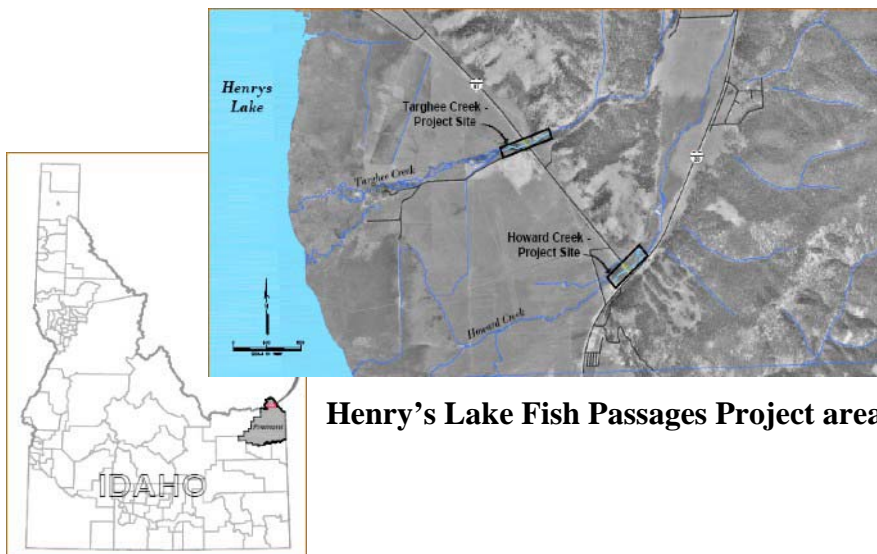
ID # (assigned by CSG): 08-W-12ID

Please provide the following information, adding space as necessary:

State: Idaho

Program Category: Natural Resources

1. *Program Name:* Henry's Lake Fish Passages Project
2. *Administering Agency:* Idaho Transportation Department
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9. Please provide a two-sentence description of the program.

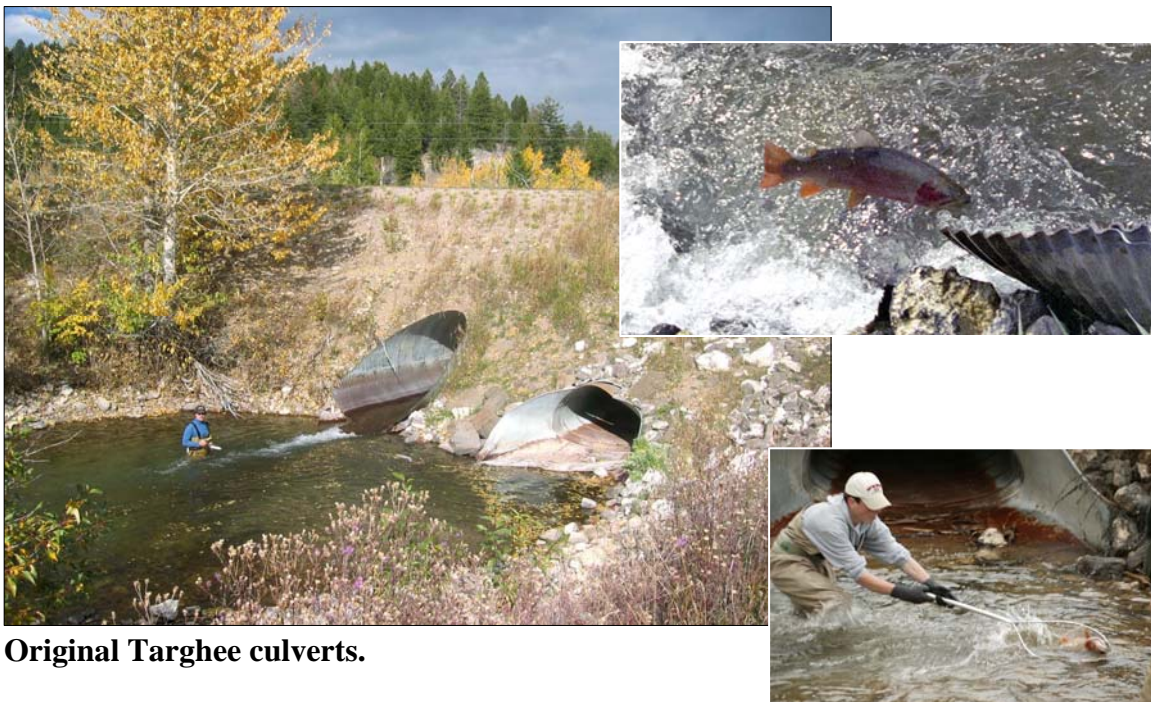
The Henry's Lake Fish Passages Project demonstrates how a diverse group of organizations with a common interest in saving a valuable resource can partner and achieve the best solution. Using a new process for conducting corridor studies and developing action plans, Idaho Transportation Department identified the need to create fish passages and craft a smooth transition from corridor planning to project design and construction in record time and within budget.

10. How long has this program been operational?

June 2003.

11. Why was the program created? What problem[s] or issue[s] was it designed to address?

Yellowstone cutthroat trout survival rates were declining in Henry's Lake, one of the country's premier Yellowstone cutthroat fisheries. Erosion-filled culverts under Idaho 87 had blocked fish movement between the lake and spawning streams. Fish had to be shocked, netted and transported around the blockage to get to the streams. The Henry's Lake Foundation, Boy Scouts, Idaho Fish and Game staff and volunteers helped move the fish to their spawning grounds. It was estimated Henry's Lake could lose its Yellowstone cutthroat trout population within four to five years. Correcting this problem was deemed a priority to protect this world-class treasure.



Original Targhee culverts.

12. Describe the specific activities and operations of the program in chronological order.

The project team first prepared a project *Guidebook* and a *Public Involvement Plan* that, along with a schedule and budget, guided the district through a corridor study. Using traditional mail, e-mail, newsletters, newspaper advertisements and a project Web site, the district engaged the communities of the corridor, resource agencies, commercial haulers, transit providers, recreational advocacy groups and two adjacent state departments of transportation (Montana and Wyoming) in a two-year-long conversation, holding both stakeholder workshops and open-house events at critical junctures.

ITD conducted an environmental scan of the area served to better understand the function of the two highways and the context in which they operate. The environmental scan concluded that because ITD roads were constructed with culvert cross-drains designed for water flow rather than fish passage, spawning of Yellowstone cutthroat trout out of Henry's Lake was interrupted years ago.

At the same time the corridor study was underway, a separate working group assembled to garner technical support and guidance from a number of nonprofit environmental organizations, as well as from state and federal agencies. That group's task was to develop a practical, environmentally sensitive approach to meet project needs and restraints. The group



streamlined an environmental stewardship approach designed to protect the resource while at the same time focusing on identifying project needs, establishing funding resources, collecting valid data, and obtaining environmental permits to establish work windows for construction and monitoring.

As the project moved forward, the working group expanded to include representatives of the Henry's Lake Foundation, Henry's Fork Foundation, Greater Yellowstone Coalition, Idaho Department of Fish and Game, U.S. Forest Service and U.S. Senator Mike Crapo. The bridge design team included ITD personnel from Materials, Traffic, Environmental, Right of Way and Design Sections, the State Bridge Engineer and GeoEngineers. This group moved into the role of supporting channel restoration as well as bridge design.

Once underway, environmental permitting and clearances, right-of-way, bridge design and construction, and stream restoration proceeded at a highly accelerated pace.

Gone are the arched pipes and culverts. In their place are two new pre-stressed concrete girder bridges, one 83 feet in length over Targee Creek and one 41 feet in length over Howard Creek.

Water that flowed under Idaho 87 in both streambeds previously dropped more than a foot into an artificially straight channel flowing into Henry's Lake. The small waterfall that impeded fish movement now flows gradually into a meandering channel that includes a series of riffles and pools, creating a "fish-friendly" environment. The new design, closely replicating the natural flow, includes sands and gravels designed for stability, and root wads, logs and other natural amenities fish enjoyed before the culverts were installed.

13. *Why is the program a new and creative approach or method?*

A partnership of public and private organizations coordinated their efforts and turned a multi-year planning and construction process into an expedited project. Using its new formal process for conducting corridor studies and developing action plans, Idaho Transportation Department was able to identify the need to create fish passages and craft a smooth transition from corridor planning to project design and construction. From planning to ribbon-cutting ceremony, the partnership remained unified and fully engaged.

Following a year of intensive public involvement and expedited corridor-planning activities, the group was positioned to identify and prioritize project needs, find funding, assemble a project team, design an improvement approach that met the need, and construct the bridges in a single year. The effort included active and essential participation from five nongovernmental organizations, three state agencies, three engineering design teams and a United States senator.

14. *What were the program's start-up costs? (Provide details about specific purchases for this program, staffing needs and other financial expenditures, as well as existing materials, technology and staff already in place.)*

The project totaled \$1.8 million for the corridor study and bridge costs. Twenty percent of the construction cost was for stream restoration. The remaining 80 percent was earmarked for the bridge structures.

15. *What are the program's annual operational costs?*

None.

16. *How is the program funded?*

The project received 90 percent of its funding from federal sources and 10 percent from the State of Idaho.

17. *Did this program require the passage of legislation, executive order or regulations? If YES, please indicate the citation number.*

No.

18. *What equipment, technology and software are used to operate and administer this program?*

None.

19. *To the best of your knowledge, did this program originate in your state? If YES, please indicate the innovator's name, present address, telephone number and e-mail address.*

No.

20. *Are you aware of similar programs in other states? If YES, which ones and how does this program differ?*

No.

21. *Has the program been fully implemented? If NO, what actions remain to be taken?*

Yes.

22. *Briefly evaluate (pro and con) the program's effectiveness in addressing the defined problem[s] or issue[s]. Provide tangible examples.*

The unified coalition of stakeholders, engaged throughout the project, was happy with the process and the outcome of the project. Working together with ITD's expedited processes, the group took a project that would have taken five to 10 years to complete and finished it in significantly less time and within budget.

Spawning trout were able to swim upstream through the bridges for the first time in years. By September 2006, as many as a 1000 fry per day were recorded swimming downstream.

23. *How has the program grown and/or changed since its inception?*

The successful project and its expedited processes have been shared throughout ITD districts and at engineering conferences.

24. *What limitations or obstacles might other states expect to encounter if they attempt to adopt this program?*

None.