

DECISION RECORD  
Maggie and Susie Creek Fish Barriers  
DOI-BLM-NV-N020-2011-0035-EA

Maggie Creek and Susie Creek drain into the Humboldt River approximately 20 miles west of Elko, Nevada. Maggie Creek supports Lahontan cutthroat trout (LCT), a federally listed threatened species. Susie Creek supported LCT historically; however, trout have been extirpated from this stream since at least the 1930's. In an effort to enhance and expand LCT populations, both the Maggie and Susie Creek drainages have been the focus of comprehensive watershed restoration efforts involving multiple public and private partners beginning in the early 1990's. Although these efforts have been very effective, state and federal biologists are concerned that improved water quality and habitat conditions in upstream reaches are making Susie and Maggie Creeks increasingly attractive to non-native bass and rainbow trout present in downstream areas, particularly the Humboldt River.

Since 2009, the Tuscarora Field Office of the Elko District of the Bureau of Land Management (BLM) has been working with partners to secure designs and funding for construction of fish barriers in the lower reaches of Maggie and Susie Creeks. The barriers would prevent non-native fish from gaining access into upstream areas which support habitat for LCT.

**Decision**

It is my decision to authorize construction of fish barriers on BLM administered lands on Maggie and Susie Creeks as proposed in the environmental assessment (EA) DOI-BLM-NV-N020-2011-0035-EA. The proposed site for the Susie Creek Fish Barrier is located approximately two miles north of Interstate 80 (T. 33 N., R. 52 E., Sec. 13 SW<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> MDM) and about two miles east of the town of Carlin, Nevada. The proposed location for the Maggie Creek barrier is on a small area of public land at the south end of the Maggie Creek Canyon in Eureka County, Nevada in T34N, R51E, Sec. 26 NW<sup>1</sup>/<sub>4</sub> SE <sup>1</sup>/<sub>4</sub> (MDM).

The design concept for both barriers utilizes a four-foot high vertical water drop with a minimal pool below the structure for the purpose of preventing upstream fish passage. The barriers would use sheet piles for efficiency of flow, ease of construction and effectiveness. Barriers would be 60 to 80 feet in length (depending on the stream) with a U shaped labyrinth weir alignment for the purpose of directing flows towards the middle of the channel. Sheet piles would be buried to a depth of 12 feet with abutments extending 16 feet into the bank on each side of the operational weir to prevent possible side cutting at higher flows. Both upstream and downstream channels would be rip-rapped, although the downstream channel would be more heavily rip-rapped for consideration of the 100 year storm potential. Streambanks would also be rip-rapped to prevent erosion. On Maggie Creek, rip rap on the west bank would extend slightly into a Nevada Department of Transportation (NDOT) right-of-way (ROW) for State Route 766.

Construction of the Maggie barrier would occur when the stream channel is dry (expected between July through December). Construction of the Susie Creek barrier would occur when the channel is either dry or when flows are very low and/or ponded (expected between July through

November). Total new disturbance is estimated to be less than one half acre for each site. With the exception of the barriers themselves, disturbance would be temporary (less than one year). The footprint for the Maggie Barrier is estimated to be less than 0.1 acre, while the footprint for the Susie Barrier is estimated to be 0.15 acres. Environmental protection measures include:

- Equipment would be washed prior to and also during construction if noxious weeds were encountered along the route.
- Areas of noxious weeds would be identified and treated before/during or after (as applicable) construction activities. Treatment would be conducted by a certified applicator using BLM approved herbicides.
- Disturbed areas would be regraded and reseeded with a BLM approved and certified weed-free mix.
- BLM would be responsible for maintenance of the barriers.
- To ensure protection of cultural resources, staging of equipment would be confined to previously disturbed areas (delineated with a visible marker such as a snow fence).
- Gates would be kept closed if livestock are present in the area.
- Any fence damage occurring as a result of construction activities would be repaired as soon as possible.
- The Nevada Contractors Field Guide for Construction Site Best Management Practices Standard Best Management Practices (BMPs) would be followed for activities associated with access, staging and construction.
- Any construction activities would be in accordance with effluent limitations, monitoring requirements, and other conditions set forth in the applicable state and federal permits for working in waterways.
- No construction or routine maintenance activities would be conducted when soils are too wet to adequately support construction equipment.

### **Monitoring**

BLM would periodically monitor the proposed barriers annually (during and after high flows) for the first five years and periodically thereafter to assess effectiveness and condition as well as any impacts the barriers would have to downstream areas. In the event of failure or other unforeseen problems, BLM would repair, modify or remove the barriers. Fish population and habitat monitoring studies have been conducted by Trout Unlimited, Newmont Mining Corporation, NDOW and/or BLM for many years in the Maggie and Susie Creek drainages. These studies would continue at approximately three year intervals (following barrier installation) to verify ongoing response by LCT to habitat improvements and to confirm effectiveness of the barriers in precluding upstream movement of non-native fish.

### **Rationale**

Construction of fish barriers in the lower reaches of Maggie and Susie Creek would prevent non-native fish species from the Humboldt River from gaining access to these streams. Non-native fish have the potential to destroy or reduce native fish, amphibian and mollusk populations directly or indirectly through hybridization, predation and competition. Installation of the barriers would ensure cooperative efforts to enhance or reestablish native LCT and other aquatic

wildlife in the Maggie and Susie Creek Basins are successful.

**Public Involvement**

Development of the proposed action identified in the EA was based on extensive scoping and with input from interested parties. The EA was posted on the BLM Elko District office website for at least 15 days in accordance with district policy. The only comments received were supportive of the proposal, and included a recommendation to consider the upstream alternative for Susie Creek. Native American consultation was conducted on preliminary design proposals in 2009 and on final design proposals in 2011.

**Effective Date and Appeal Rights**

This decision is effective as of the date of my signature below. Anyone who feels they may be adversely affected may appeal this decision to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4. An appeal must be filed within 30 days from receipt or notification of this decision. The appellant has the burden of showing that the decision appealed from is in error. If you wish to file a petition pursuant to regulations at 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. Questions related to this decision and the process for appeals may be directed to the Tuscarora Field Office at 775-753-0200.

/s/ David Overcast  
DAVID OVERCAST, Manager  
Tuscarora Field Office

Nov. 1, 2011  
DATE