

**Biological Baseline Report
US 199: Expressway Upgrade
Grants Pass, Josephine County
Key No. 14019**

To: Project File

From: Ken Cannon, ODOT District 8 Biologist

Date: May 5, 2005

RE: Review of project for potential impacts to fish, wildlife and plant resources

Project Description:

Highway 199, also known as Redwood Highway, is a five-lane, east/west highway that is designated as an expressway within the project limits from Tussey Lane to Midway Avenue and is an important highway for travelers wishing to move east and west between Interstate 5 and US 101. For the past decade, Highway 199 from its intersection with Tussey Lane to its intersection with Midway Avenue has experienced a crash rate that is consistently higher than the statewide average for similar facilities. In 2004, 25 percent of all traffic fatalities within Josephine County happened within the Highway 199 project limits.

The character of Highway 199 varies within this area. From Tussey Lane to Dowell Road the character varies from fully developed urban to suburban. Speeds are moderate with traffic stopping at several signals. This section of the highway experiences the highest number of accidents. From Dowell Road to Midway Avenue the character of the roadway transitions to a more rural setting. This section of highway experiences less accidents, but the severity of the accidents is greater due to the higher speeds. The majority of the severe injury/fatality accidents are related to vehicles making turning movements onto and off of the highway at private or public accesses. The purpose of the project is to address vehicular and pedestrian safety, and current and future congestion and operational deficiencies, along Highway 199 between Tussey Lane and Midway Avenue.

Potential Impacts to flora and fauna:

Potential impacts from the project to sensitive natural resources (fish, wildlife and plants) within the area of potential impact (API) were determined by referring to the Oregon Natural History Information Center (ORNHIC) database, Federal and state T&E species lists, cited literature, and best professional judgment based on a site visit to the project area.

Below is a summary of *federally listed* threatened and endangered (T&E) species in Josephine County (US Fish and Wildlife Service, May 28, 2004).

Fish

Coho salmon (*O. kisutch*)- Threatened (T)

Wildlife

Marbled murrelet (*Brachyramphus marmoratus*)- T

Bald eagle (*Haliaeetus leucocephalus*)- T

Northern spotted owl (*Strix occidentalis caurina*)- T

Plants

McDonald's rockcress (*Arabis mcdonaldiana*)- Endangered (E)

Gentner's fritillary (*Fritillaria gentneri*)- E

Cook's lomatium (*Lomatium cookii*)- E

There are no federally proposed or candidate species at this time.

The ORNHIC database did not indicate the presence of *state listed or proposed* fish and wildlife species within the API.

Fisheries

The Rogue River supports native stocks of summer and winter steelhead (*O. mykiss*), spring and fall Chinook salmon (*O. tshawytscha*), coho salmon (*O. Kisutch*), cutthroat trout (*O. clarki*) and Pacific lamprey (*Lampetra tridentata*). Additionally, non-game resident species and exotics are present in the Rogue and its tributaries. Hatchery stocks of summer and winter steelhead, spring Chinook and coho are also present in the system. The ORNHIC identifies Southern Oregon-Northern California (SONC) coho salmon as federally threatened (LT) and state sensitive-critical (SC). No other fish species are listed or proposed to be listed at this time.

The US 199 Expressway project is within close proximity (0.27 mile at closest point) of the Rogue River, but does not cross the river. The project does however, cross Allen Creek and Sand Creek. Both of these creeks are tributaries to the Rogue and within the API. SONC coho salmon (LT) are known to occur in Sand Creek and likely occur in Allen Creek.

Critical habitat- Critical habitat for SONC coho has been designated by the National Marine Fisheries Service (NMFS). The Federal Registry (Vol. 62, No. 87, May 6, 1997, Final Rule) contains detailed information about this designation. Critical habitat has been defined as the area within 300 feet from the OHW elevation of a stream where a listed species is present or was historically present. Impacts to critical habitat will need to be evaluated in a biological assessment and mitigated. Potential effects outside the 300 foot designation also need to be evaluated, since some impacts can affect designated critical

habitat. Anticipated impacts from a highway project of this nature include tree removal and changes to stream hydrology from an increase in stormwater runoff.

Stormwater management- Alternatives currently under consideration will create new impervious surface, but may also remove old impervious surface. Much of the new areas to be paved are already compacted gravel and considered impervious. Additionally, some impervious areas will likely become pervious as a result of construction. Net new impervious surface will generate stormwater runoff that could affect base and peak flows in tributary streams and the Rogue River. To prevent or minimize changes to base and peak flows, stormwater treatment should be provided by the project. A stormwater management plan will need to be developed by a water quality specialist and hydraulics engineer to properly evaluate and treat any net new impervious surface. If a water quality treatment facility is constructed, a USACOE and DSL permit may be required if work is required below the OHW elevation.

Allen Creek Culvert (US199)- Project work will occur above the Allen Creek culvert. ODFW is currently evaluating the project to determine if the proposed work will trigger the Oregon fish passage law (ORS 509.585). Initial comments from ODFW indicate the project will not trigger fish passage requirements in the Allen Creek culvert. The fish passage law is triggered if a culvert is extended or if 50% or more of its linear length is replaced. Additional triggers include adding fill within 10 feet or 3 stream width of either side of the stream or fill or removal of over 50% of the roadbed material directly above the culvert. None of these impacts are anticipated from this project.

If the project is determined to trigger the fish passage law than ODOT will have three options: 1. Make the culvert meet fish passage criteria (see ODFW guidance). Given the length and multiple jurisdictions involved this would be a very expensive option, 2. Apply for a waiver (requires off-site mitigation), or 3. Apply for an exemption (no mitigation required, but must prove limited habitat above the culvert). In this case ODOT would likely apply for a waiver and mitigate off-site.

Sand Creek culvert (US 199)- The project will cross Sand Creek. The roadway prism will not be changed in this area (i.e. no widening). The culvert will not be extended and no in-water work will be needed. The anticipated work will not trigger the Oregon fish passage law.

Sand Creek (Redwood Avenue)- The project will extend west on Redwood Avenue and end just before crossing Sand Creek. No work will be done on or above the culvert. The anticipated work will not trigger fish passage requirements at this culvert.

Summary- Consultation with NMFS will likely be required because of potential effects from changes to base and peak flows from new impervious surface. If stormwater is treated according to NOAA Stormwater Guidance (March 2003), consultation can be completed using SLOPES III. Using SLOPES will require a nexus with the USACOE (i.e. a Corps permit). A Project Notification Form will need to be completed in lieu of a

biological assessment (BA). If no USACOE permit is needed, than a Not Likely Adverse Effect (NLAA) BA should be submitted to NMFS using FHWA as the nexus.

If no impacts are anticipated from stormwater and no in-water work is required than a No Effect letter should be produced for the project file.

Wildlife:

The USFWS T&E species list cited above lists three threatened wildlife species within Josephine County. None of these species occur within the API of the project. As currently designed, the project will not affect listed wildlife species.

Other wildlife concerns- Impacts to migratory birds and bats are not expected from this project. These species are sometimes affected during bridge and culvert construction and tree removal. The project, as currently designed, does not include culvert work. Tree removal will likely be minimal, if any.

Plants:

The USFWS T&E species list indicates three federally endangered plants are found within Josephine County.

Red Mountain rockcress (*Arabis macdonaldiana*) is found SW of Cave Junction at mid to high elevations. This species is not found within the API of the project. *Fritillaria gentneri* favor oak woodland habitat and *Lomatium cookii* are associated with wetland habitats. Cursory plant surveys indicated these listed plant species are not found within the API.

State listed plant species within Josephine County include:

Calochortus indecorus (thought extinct, Mt. Sexton)
Fritillaria gentneri (E), also federally listed, see above
Lomatium cookii (E), also federally listed, see above
Plagiobothrys lamprocarpus (thought extinct)
Calochortus howellii (T) (southern Josephine Co.)
Hastingsia bracteosa (T) (Illinois Valley)
Microseris howellii (LT) not found within the API

According to the ORNHIC database and cursory plant surveys none of these species occur within the API.

ODOT concludes the alternatives currently under consideration will not affect state or federally listed or proposed plant species.

Conclusion:

ODOT (FHWA designate) is required by law to consult with federal and/or state natural resource agencies if a project will impact a listed species or its designated critical habitat. ODOT will typically 'conference' with resource agencies if a species is proposed to be listed, but not currently listed. This strategy is used to expedite consultation should a proposed species become listed during the construction of the project. There are currently no proposed species within the API of this project. No conferencing or consulting is required for species of concern or candidate species.

Based on the current scope of the project and presence of a federally listed species (SONC coho salmon, LT) within the API, consultation with the NMFS will likely be needed. If a nexus with the USACOE exists, the consultation can be completed using SLOPES III. This is the preferred method of consultation from both a cost and time perspective. If a USACOE nexus does not exist (i.e. no Corps permit needed), a not likely adverse affect (NLAA) biological assessment will need to be written and submitted to NMFS for concurrence. The timeline to complete the writing of the document and consultation process is approximately 60-90 days.

References:

Marmon, Jerry ODOT Environmental Project Manager, White City.
Programmatic Biological Opinion for Standard Local Operating Procedures for
Endangered Species (SLOPES III).
NOAA Stormwater Guidance, March 2003 version.
ODFW Fish Passage Statute Trigger Clarification (Draft).
ODFW Fish Passage Criteria, October 22, 2004.
Oregon Natural History Information Center (ORNHIC) database, May 2004.
Recovery Plan for *Fritillaria gentneri*, July 2003.
State List of Endangered and Threatened Species, Oregon Department of Agriculture.
USFWS Listed and Proposed Endangered and Threatened Species in Josephine County
May 2004.