

## IMPLEMENTATION SCHEDULE

The following are definitions to column headings and keys to abbreviations and acronyms used in the Implementation Schedule:

Priority Number: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species' population or habitat quality or to prevent some other significant negative impact short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

Task Number and Task Description: Recovery tasks as numbered in the recovery outline. Refer to the action narrative for task descriptions.

Task Duration: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task, which when combined may reduce the time needed for task completion.

Responsible or Participating Party: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery task. **Bold type** indicates the agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility. Identified parties include:

|       |  |
|-------|--|
| USFWS | U.S. Fish and Wildlife Service         |
| USFS  | U.S. Forest Service                    |
| ODFW  | Oregon Department of Fish and Wildlife |
| UPR   | Union Pacific Railroad                 |

|       |  |
|-------|--|
| RUT   | Recovery Unit Team                         |
| EPA   | U.S. Environmental Protection Agency       |
| DEQ   | Oregon Department of Environmental Quality |
| OSP   | Oregon State Police                        |
| USDOT | U.S. Department of Transportation          |

Cost Estimates: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task and also itemized annually for the next five years.

An asterisk (\*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

Double asterisk (\*\*) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (\*\*\*) indicates costs are combined with or embedded within other related tasks.

Chapter 8 - Odell Lake

| <b>Implementation schedule for the Odell Lake bull trout recovery unit chapter</b> |                    |   |                              |                                 |  |               |               |               |               |   |
|--|--------------------|---|------------------------------|---------------------------------|--|---------------|---------------|---------------|---------------|---|
| <b>Task Priority</b>   | <b>Task Number</b> | <b>Task Description</b>   | <b>Task Duration (years)</b> | <b>Responsible Parties</b>      | <b>Cost Estimates (in \$1,000 units)</b> |               |               |               |               | <b>Comments</b>   |
|  |                    |   |                              |                                 | <b>Total Costs</b>                       | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |   |
| 1  | 1.2.1              | Eliminate entrainment in diversions   | 2                            | ODFW<br>USFS<br>private parties | 200                                      |               | 50            | 150           |               | Covered partially under existing programs.                          |
| 1  | 1.2.2              | Provide passage at dams   | 2                            | RUT<br>UPR                      | 30                                       |               | 10            | 20            |               | Cost are for evaluation only. Cost for action unknown at this time. |
| 1  | 1.3.2              | Restore stream channels   | 2                            | USFS                            | 250                                      | 150           | 100           |               |               | Cost are for Phase I of Trapper Creek Project .                     |
| 1  | 2.5.1              | Implement management actions wherever feasible and biologically supportable to control nonnative fishes | 25                           | ODFW<br>USFS                    | 250                                      | 10            | 10            | 10            | 10            | Ongoing   |
| 1  | 3.3.1              | Evaluate site-specific conflicts with introduced sport fish   | 5                            | ODFW                            | 250                                      |               | 50            | 50            | 50            |   |

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|--|--------------------|--|------------------------------|----------------------------|--|---------------|---------------|---------------|---------------|--|
| <b>Task Priority</b>   | <b>Task Number</b> | <b>Task Description</b>  | <b>Task Duration (years)</b> | <b>Responsible Parties</b> | <b>Cost Estimates (in \$1,000 units)</b> |               |               |               |               | <b>Comments</b>  |
|  |                    |  |                              |                            | <b>Total Costs</b>                       | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |  |
| 1  | 5.2.1              | Determine factors limiting bull trout recovery in the Odell Lake Recovery Unit | 4                            | USFS, ODFW                 | 100                                      |               | 25            | 25            | 25            | USFS hopes to study how water quality and stratification affect bull trout distribution and access to tributaries during spawning. |
| 1  | 5.5.2              | Identify and map bull trout spawning habitat                                   | 8                            | USFS, ODFW                 | 40                                       |               | 5             | 5             | 5             | Covered under existing programs.   |
| 1  | 6.1.3              | Secure funding and cooperation to implement recovery strategies                | 25                           | RUT, USFWS                 | *  |               |               |               |               | Ongoing, covered under existing programs.  |
| 2  | 1.1.1              | Reduce general sediment sources  | 5                            | UPR, RUT                   | 200                                      |               | 60            | 40            | 40            |  |

Chapter 8 - Odell Lake

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|---|-------------|--|-----------------------|----------------------|-----------------------------------|--------|--------|--------|--------|---|
| Task Priority   | Task Number | Task Description   | Task Duration (years) | Responsible Parties  | Cost Estimates (in \$1,000 units) |        |        |        |        | Comments  |
|   |             |  |                       |                      | Total Costs                       | Year 1 | Year 2 | Year 3 | Year 4 |   |
| 2   | 1.1.2       | Assess water quality in Odell Lake   | 2                     | DEQ, USFS, ODFW, EPA | 25                                | 5      | 20     |        |        | May be completed as part of TMDL process for pH and algae. USFS collected water quality data in 2001. |
| 2   | 1.3.1       | Restore riparian habitat   | 25                    | USFS                 | *                                 |        |        |        |        | Ongoing, most covered under existing programs. Trapper Creek covered under 1.3.2.                     |
| 2   | 1.3.3       | Assess stream habitat restoration potential  | 3                     | USFS, ODFW           | *                                 |        |        |        |        | Covered under existing programs.  |
| 2   | 3.2.1       | Increase angler education and outreach efforts   | 5                     | ODFW, USFS, RUT      | 50                                | 10     | 10     | 10     | 10     | May be combined with other similar actions in other RUs.  |
| 2   | 3.2.2       | Develop fish management strategies to achieve a sustainable Odell Lake adfluvial bull trout population | 25                    | RUT                  | *                                 |        |        |        |        | Ongoing   |

Chapter 8 - Odell Lake

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| <b>Task Priority</b>   | <b>Task Number</b> | <b>Task Description</b>   | <b>Task Duration (years)</b> | <b>Responsible Parties</b> | <b>Cost Estimates (in \$1,000 units)</b> |               |               |               |               | <b>Comments</b>  |
|  |                    |   |                              |                            | <b>Total Costs</b>                       | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |  |
| 2  | 3.4.1              | Determine effects of existing sport fishing regulations in Odell Lake on bull trout | 1                            | ODFW                       | 50                                       | 50            |               |               |               | Covered under existing programs, but subject to available funding. |
| 2  | 5.2.2              | Protect and restore habitat in the Odell Lake Recovery Unit                         | 25                           | USFS                       | *  |               |               |               |               | Ongoing, covered under existing programs.                          |
| 2  | 5.5.1              | Survey for bull trout presence/absence  | 5                            | USFS, ODFW                 | 50                                       | 10            | 10            | 10            | 10            | Covered under existing programs.                                   |
| 2  | 5.5.3              | Establish abundance estimates   | 5                            | ODFW                       | *  |               |               |               |               | Covered under existing programs.                                   |
| 2  | 5.6.2              | Determine juvenile life history of bull trout in the Odell Lake Recovery Unit       | 25                           | ODFW, USFS                 | *  |               |               |               |               | Ongoing, covered under existing programs.                          |
| 2  | 5.6.3              | Identify sources of bull trout mortality by life stage                              | 1                            | ODFW, USFS                 | 40                                       | 40            |               |               |               |  |

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|--|--------------------|---|------------------------------|----------------------------|--|---------------|---------------|---------------|---------------|--|
| <b>Task Priority</b>   | <b>Task Number</b> | <b>Task Description</b>                                     | <b>Task Duration (years)</b> | <b>Responsible Parties</b> | <b>Cost Estimates (in \$1,000 units)</b> |               |               |               |               | <b>Comments</b>  |
|  |                    |   |                              |                            | <b>Total Costs</b>                       | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> |  |
| 2  | 6.1.1              | Support watershed group restoration efforts                 | 25                           | RUT                        | *  |               |               |               |               | Ongoing, covered under existing programs.  |
| 3  | 3.1.1              | Incorporate bull trout recovery actions into existing plans | 25                           | ODFW                       | *  |               |               |               |               | Ongoing, rule changes to ODFW basin plans will require approval by Fish and Wildlife Commission. |
| 3  | 5.4.1              | Monitor for fish pathogens                                  | 25                           | ODFW                       | *  |               |               |               |               | Ongoing, covered under existing programs.  |
| 3  | 6.1.2              | Develop an outreach program to share information            | 4                            | USFS, ODFW                 | 20                                       | 15            | 5             |               |               | Could be part of a statewide or regional outreach program.                                       |
| 3  | 7.3.1              | Periodically reassess priorities                            | 25                           | RUT                        | *  |               |               |               |               | Reassess periodically, costs covered under existing programs.                                    |

**REFERENCES**