

MEMORANDUM | January 9, 2013

TO U.S. Fish and Wildlife Service
FROM Industrial Economics, Incorporated (IEc)
SUBJECT Incremental Impacts Associated with the Final Critical Habitat Designation for the Lost River and Shortnose Suckers

The purpose of this memorandum is to provide information on the incremental economic impacts associated with the final critical habitat designation for the Lost River and shortnose suckers (hereafter, “Klamath suckers”) as described in the Final Rule.¹

The December 2012 Economic Analysis of Critical Habitat Designation for the Klamath suckers (FEA) estimates the incremental economic impacts associated with proposed critical habitat as described in the Proposed Rule.² In total, the area analyzed in the FEA includes approximately 117,848 acres of lakes and reservoirs and 146 river miles for the Lost River sucker, and 123,590 acres of lakes and reservoirs and 128 river miles for the shortnose suckers.

The Final Rule adds approximately 7 river miles to proposed critical habitat Unit 1 for the shortnose sucker, but no additional lake or reservoir area. These additional river miles were included based on additional information indicating that the area provides spawning and rearing habitat for the shortnose sucker, and as such, is important for ensuring that multiple viable spawning populations are conserved throughout the species’ range.³ Because these 7 additional miles include the same sections of the Wood River and Crooked Creek that were proposed and now designated in Unit 1 for the Lost River sucker, the combined area of final critical habitat designation for the two species does not differ from the combined area presented in the proposed rule. As no additional conservation activity is anticipated specifically for the shortnose sucker in these sections of the Wood River and Crooked Creek, the additional 7 miles included in the final designation of critical habitat for that species does not affect the cost estimates presented in the FEA.

In addition, in preparing the final critical habitat designation, the Service discovered errors in calculation of some of the land ownership totals for the proposed units in Tables 1 and 3 of the revised proposed designation.⁴ As noted in the Final Rule, although the ownership totals were incorrect, the totals for each individual ownership category were correctly identified.⁵ The corrected ownership totals, including the additional river miles

¹ 77 FR 73740.

² 76 FR 76337.

³ 77 FR 73747.

⁴ 76 FR 76337.

⁵ 77 FR 73747.

for the shortnose sucker within Unit 1, are presented in the Final Rule and in Exhibit 1 below. These corrections do not affect the cost estimates presented in the FEA as the FEA included the correct ownership totals for the proposed critical habitat designation.

EXHIBIT 1. LAND OWNERSHIP WITHIN FINAL KLAMATH SUCKERS CRITICAL HABITAT

| CRITICAL HABITAT UNIT | | SPECIES | FEDERAL | STATE | PRIVATE/ OTHER | TOTAL |
|---|--------------------|------------|---------------|--------------|-------------------|----------------|
| Area of Lakes and Reservoirs (Acres) | | | | | | |
| 1 | Upper Klamath Lake | Lost River | 15,198 | 533 | 74,684 | 90,415 |
| 2 | Lost River Basin | | 27,238 | 0 | 194 | 27,432 |
| Total | | | 42,437 | 533 | 74,878 | 117,848 |
| 1 | Upper Klamath Lake | Shortnose | 15,198 | 533 | 74,684 | 90,415 |
| 2 | Lost River Basin | | 32,051 | 0 | 1,124 | 33,175 |
| Total | | | 47,250 | 533 | 75,808 | 123,590 |
| Stream Length (Miles) | | | | | | |
| 1 | Upper Klamath Lake | Lost River | 13 | <1 | 106 | 119 |
| 2 | Lost River Basin | | 23 | <1 | 3 | 27 |
| Total | | | 36 | <1 | 109 | 146 |
| 1 | Upper Klamath Lake | Shortnose | 6 | 0 | 41 | 47 |
| 2 | Lost River Basin | | 72 | <1 | 16 | 89 |
| Total | | | 78 | <1 | 57 | 136 |
| Source: Final Rule, Tables 1 through 4. Note: tables may not sum due to rounding. | | | | | | |

Exhibit 2 presents the estimated incremental impacts associated with the designation of critical habitat for the Klamath suckers occurring between 2012 and 2031. Absent changes in the scope of the final designation, these results mirror those presented in the FEA. The present value total incremental impacts of the final critical habitat designation are \$586,000 (seven percent discount rate). Annualized, these impacts are \$51,700. These impacts represent the additional administrative effort required to address adverse modification of critical habitat as part of future consultations on activities affecting: (1) water supply such as dam operation and hydropower production; (2) water quality such as livestock grazing and in-stream construction; and (3) fish passage such as flood control or water diversions.

As described in Section 4.1 of the FEA, the incremental impacts of critical habitat designation are limited to additional administrative costs of consultations. Conservation measures implemented due to the listing of the species in the baseline are expected to be sufficiently protective of critical habitat. Consequently, critical habitat designation is not likely to change the types or levels of conservation being implemented for these species.

EXHIBIT 2. TOTAL ESTIMATED INCREMENTAL IMPACTS BY UNIT (2012-2031, \$2012,
DISCOUNTED AT SEVEN PERCENT)

| UNIT | UNIT NAME | PRESENT VALUE | ANNUALIZED |
|--|--------------------|------------------|-----------------|
| 1 | Upper Klamath Lake | \$259,000 | \$22,900 |
| 2 | Lost River Basin | \$326,000 | \$28,800 |
| | Total | \$586,000 | \$51,700 |
| Note: Totals may not sum due to rounding. | | | |