



# NORTHWEST ECONOMIC A S S O C I A T E S

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## MEMORANDUM

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**TO:** Edward Maillett, U.S. Fish and Wildlife Service  
**FROM:** Krieg Brown, ENTRIX, Inc.  
**DATE:** October 21, 2005  
**RE:** Estimated Economic Impacts of the Final Critical Habitat  
Designation for the Spreading Navarretia

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The September 2005 Final Economic Analysis of Proposed Critical Habitat Designation for the Spreading Navarretia (Final EA) assesses the potential economic impacts associated with the proposed designation of critical habitat for the spreading navarretia (*Navarretia fossalis*, hereafter “navarretia”) as described by the U.S. Fish and Wildlife Service (Service) in the Proposed Rule.<sup>1</sup> The Final EA is consistent with the designation as described in the Proposed Rule and therefore does not reflect changes made to the proposed critical habitat in the Final Rule.

The Final EA details potential economic impacts of navarretia conservation efforts in the lands described in the proposed rule of \$96.0 to \$256.0 million in undiscounted dollars, or \$48.6 to \$129.0 million in present value terms using a discount rate of seven percent. Annualized costs are estimated to range from \$4.6 to \$12.2 million, also at seven percent (see Exhibit 1). The Service has excluded from final critical habitat, however, all lands within Marine Corps Air Station (MCAS) Miramar and Marine Corps Base (BCB) Camp Pendleton due to approved and completed Integrated Resource Management Plans pursuant to section 4(a)(3) of the Act, as well as all non-Federal lands within approved Habitat Conservation Plans (HCPs) pursuant to section 4(b)(2) of the Act. The Service also refined its mapping criteria to better delineate habitat and excluded from final designation those lands that do not contain the physical and biological features essential to the conservation of navarretia.<sup>2</sup>

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<sup>1</sup> U.S. Fish and Wildlife Service, October 7, 2004, “Proposed Designation of Critical Habitat for *Navarretia fossalis* (spreading navarretia), Proposed Rule,” *Federal Register*, Vol. 69, No. 194, pp. 60110-60134.

<sup>2</sup> For descriptions of the rationale for these exclusions please reference the Designation of Critical Habitat for *Navarretia fossalis* (spreading navarretia): Final Rule, published in the Federal Register on October 18, 2005, Vol. 70, No. 200. pp. 60658-60694.

Exhibit 1 provides an estimate of the economic impacts of navarretia conservation efforts in areas designated as critical habitat for the navarretia. The present value (assuming a seven percent discount rate) of post-designation costs is estimated to be \$2.0 million to \$4.6 million, or \$193,100 to \$436,600 in annualized terms. Impacts included in the Final EA related to pipelines, flood control, MCAS Miramar, and MCB Camp Pendleton do not occur within the bounds of the final designation, and impacts related to public land management, transportation projects, and urban development have been adjusted to coincide with the final designation.

**EXHIBIT 1:**

**ECONOMIC IMPACTS OF CONSERVATION EFFORTS FOR THE SPREADING NAVARRETIA  
WITHIN THE AREAS DESIGNATED AS FINAL CRITICAL HABITAT**

<b>Total Post-designation Impacts (2006-2025)</b>	<b>Impacts Estimated in Final CHD</b>
Undiscounted	\$3.8 million - \$8.8 million
Present Value (7% discount rate)	\$2.0 million - \$4.6 million
Annualized (7% discount rate)	\$193,100 - \$436,600
Present Value (3% discount rate)	\$2.9 million - \$6.6 million
Annualized (3% discount rate)	\$193,800 - \$441,300