

*Exxon Valdez* Oil Spill  
Restoration Project Annual Report

Kenai River Habitat Restoration and Recreation Enhancement Project

Restoration Project 96180  
Annual Report

This annual report has been prepared for peer review as part of the *Exxon Valdez* Oil Spill Trustee Council restoration program for the purpose of assessing project progress. Peer review comments have not been addressed in this annual report.

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April 1997

## Kenai River Habitat Restoration and Recreation Enhancement Project

### Restoration Project 96180 Annual Report

**Study History:** This project was initiated as Restoration Project 96180 and continues as Restoration Project 97180. The project was proposed as a three year effort with 1998 as the final year for construction activities.

**Abstract:** Adverse impacts to the banks of the Kenai River total approximately 19 miles of the river's 166 mile shoreline. Included in this total are 5.4 river miles of degraded shoreline on public land. Riparian habitats have been impacted by trampling, vegetation loss and structural development. This riparian zone provides important habitat for pink salmon, sockeye salmon and Dolly Varden, species injured by the *Exxon Valdez* oil spill. The project's objectives are to restore injured fish habitat, protect fish and wildlife habitat, enhance and direct recreation and preserve the values and biophysical functions that the riparian habitat contributes to the watershed. Restoration/enhancement techniques will include revegetation, streambank restoration, elevated boardwalks, floating docks, access stairs, fencing, signs, and educational interpretive displays.

**Key Words:** *Exxon Valdez*, riparian habitat, sport fishing, Kenai River, revegetation, streambank restoration.

**Project Data:** (will be addressed in the final report)

**Citation:** Weiner, A. and M. Kuwada. 1997. Kenai River Habitat Restoration and Recreation Enhancement Project, *Exxon Valdez* Oil Spill Restoration Project Annual Report (Restoration Project 96180), Alaska Department of Natural Resources and Alaska Department of Fish and Game, Anchorage, Alaska.

### **Accomplishments:**

During 1996, the following project elements were accomplished:

1. Development of site assessment and nomination procedures,
2. Development of a digital database containing site assessment and nomination data,
3. Development of an evaluation and ranking process for nominated projects,
4. An Interdisciplinary Team (IDT) of biologists, resource managers and planners was selected to review evaluation procedures and nominated projects,
5. Review and evaluation, by the IDT, of 16 projects nominated by public landowners,
6. Public scoping meetings were held in Anchorage, Kenai and Cooper Landing to discuss the project,
7. Production and publication of an Environmental Assessment (EA) document,
8. Review and response to EA comments, with subsequent issuance of a FONSI by the USFWS,
9. Development of Cooperative Agreements that will form the basis for funding projects carried out by public landowners,
10. Consummation of agreements between ADF&G/ADNR and public landowners for five projects will take place in 1997,
11. Construction began on the Kenai Beach Dunes project.

During 1997, the following project elements were accomplished:

1. Review and evaluation of 7 new projects nominated by public landowners,
2. Production and publication of an Environmental Assessment (EA) document for the 1997 projects,
3. Completion of the Kenai Beach Dunes project,
4. Development of a Kenai River educational Web page published on the Internet,
5. Site inspections, oversight and contract management for 1996 and 1997 projects.

Restoration and enhancement proposals on public lands extending from the outlet of Kenai Lake to the mouth of the Kenai River (Figure 1), were nominated by public landowners and evaluated by an Interdisciplinary Team (IDT) of biologists and resource managers using specific threshold and evaluation criteria (Table 1). The IDT designed the qualifying criteria used to evaluate and rank the proposals by considering a variety of factors, including the degree of damage at a site and the effects that each proposal will have on fish habitat, recreation, and the surrounding environment.

Conceptual restoration and enhancement plans were presented to the IDT for evaluation. Final engineered plans were provided to ADFG/ADNR prior to construction. Choice of building materials and construction methods are the responsibility of the landowner (but subject to IDT review) and must employ restoration techniques permissible by regulatory agencies (ADFG, ADNR, and the Army Corps of Engineers).

The project was proposed to last for three years, beginning in 1996. The seven qualifying proposals initiated in 1996 will be completed in 1997. Construction was started on one in 1996 and construction will begin on the other six this spring. Projects approved for funding in 1997 will be completed in 1998. Monitoring of funded proposals will be carried out by ADFG/ADNR to ensure the proposals are constructed and function as designed. Monitoring will also be used to gather information regarding effectiveness of restoration techniques.

Seven 1997 nominations (Table 2) were evaluated and scored according to threshold and evaluation criteria. One proposal, Kenai Mouth-South Side Access, was disqualified because it did not fulfill all threshold criteria. The majority of funding for the Centennial Park project will come from another source. If funding is approved, six sites will be restored in 1998.

Because all proposals had to meet threshold criteria before the evaluation criteria were applied, six proposals are eligible for funding. The scores are a method of ranking those proposals that best achieve the overall project's goals for habitat restoration, compatible recreation enhancement, and educational value. In an attempt to identify the most cost-effective proposals and obtain maximum benefits from available funds, it was decided to compare the relative restoration benefits of the proposals in terms of costs. To facilitate that determination, the results of the evaluation process, i.e. the scores, were plotted against the estimated costs. Figure 2 displays the relative or comparative restoration benefits of the 1997 proposals as a function of cost. Figure 3 is a composite plot of the 1996 and 1997 nominations.

Cooperative agreements or Reciprocal Service Agreements (RSA's) will be negotiated and signed for the projects identified in the Preferred Alternative of the EA. Construction should begin on these five proposals in 1997 and 1998.

**Table 1: Threshold and Evaluation Criteria**

**Threshold Criteria**

1. The project will protect, restore or enhance the historic functional attributes of a site and the surrounding area.
2. The project is located on public land.
3. The managing agency agrees to endorse the project.
4. The managing agency agrees to future maintenance and management of the project in a manner that facilitates and is consistent with the restoration or enhancement endpoint (#1).
5. All elements of the project can be permitted.
6. The project is not a mitigation requirement.

**Nomination must be in compliance with all Threshold Criteria.**

**Evaluation Criteria**

1. Potential Habitat Value  
What is the potential habitat value of the project? [Score = (20/10/5) x 3.5]
2. Potential Recreation Value  
What is the potential recreation value of the project? [Score = (20/10/5) x 2.5]
3. Disturbance Level  
What is the level of disturbance (human impact) in relation to habitat/recreation values?  
[Score = (20/10/5) x 2.0]
4. Rate  
To what extent will the project decrease the amount of time needed for riparian habitat to recover? [Score = (20/10/5) x 1.0]
5. Collateral Impacts  
What is the potential for adverse impacts to natural or cultural resources or to the nearby human community resulting from this project?  
[Inverse relationship: Score = (5/10/20) x 3.0]
6. Design/Effectiveness  
How would you rate the project's design to its expected effectiveness?  
[Score = (20/10/5) x 2.0]
7. Vulnerability  
Is the protected, restored or enhanced site vulnerable to natural or human-induced degradation. [Inverse relationship: Score = (5/10/20) x 2.0]

<u>Project ID</u>	<u>Project Name</u>	<u>Project Score</u>
K 17	Cone	222
K 18	Kobylarz	253
K 19	Russian River Phase 2	241
K 20	Centennial Park 97	294
K 21	Slikok Creek	300
K 22	Bing's Landing	261

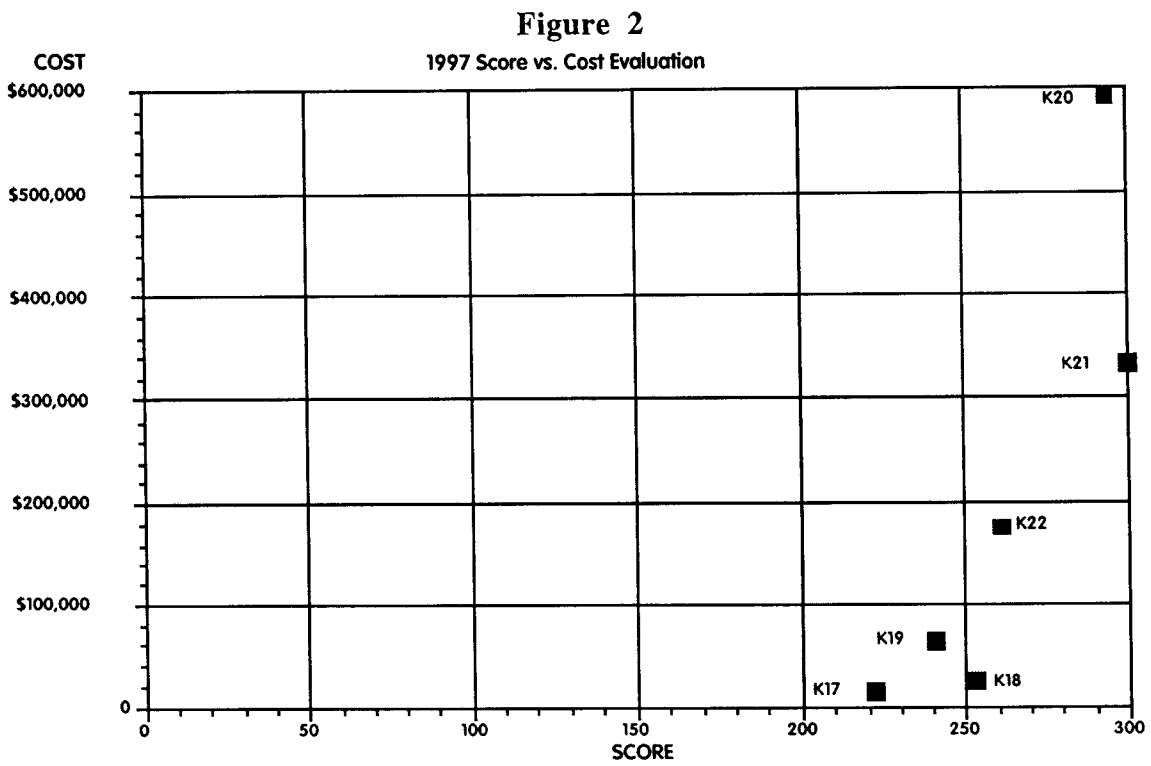
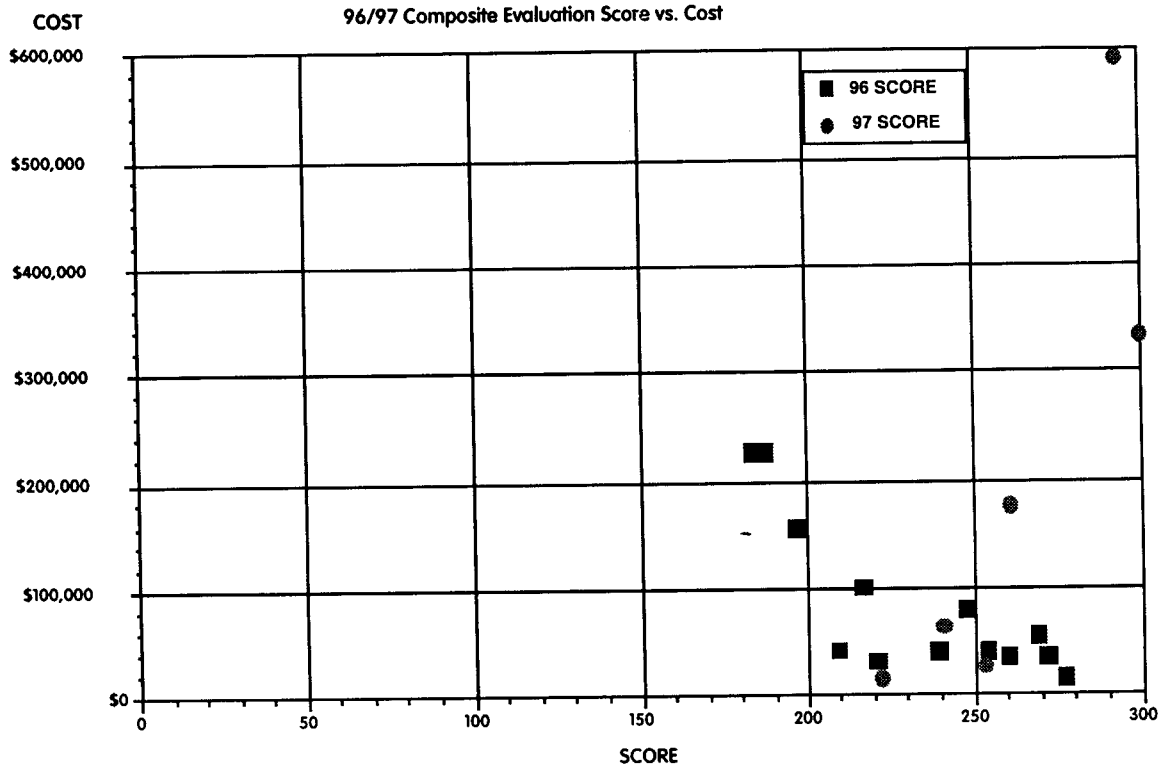
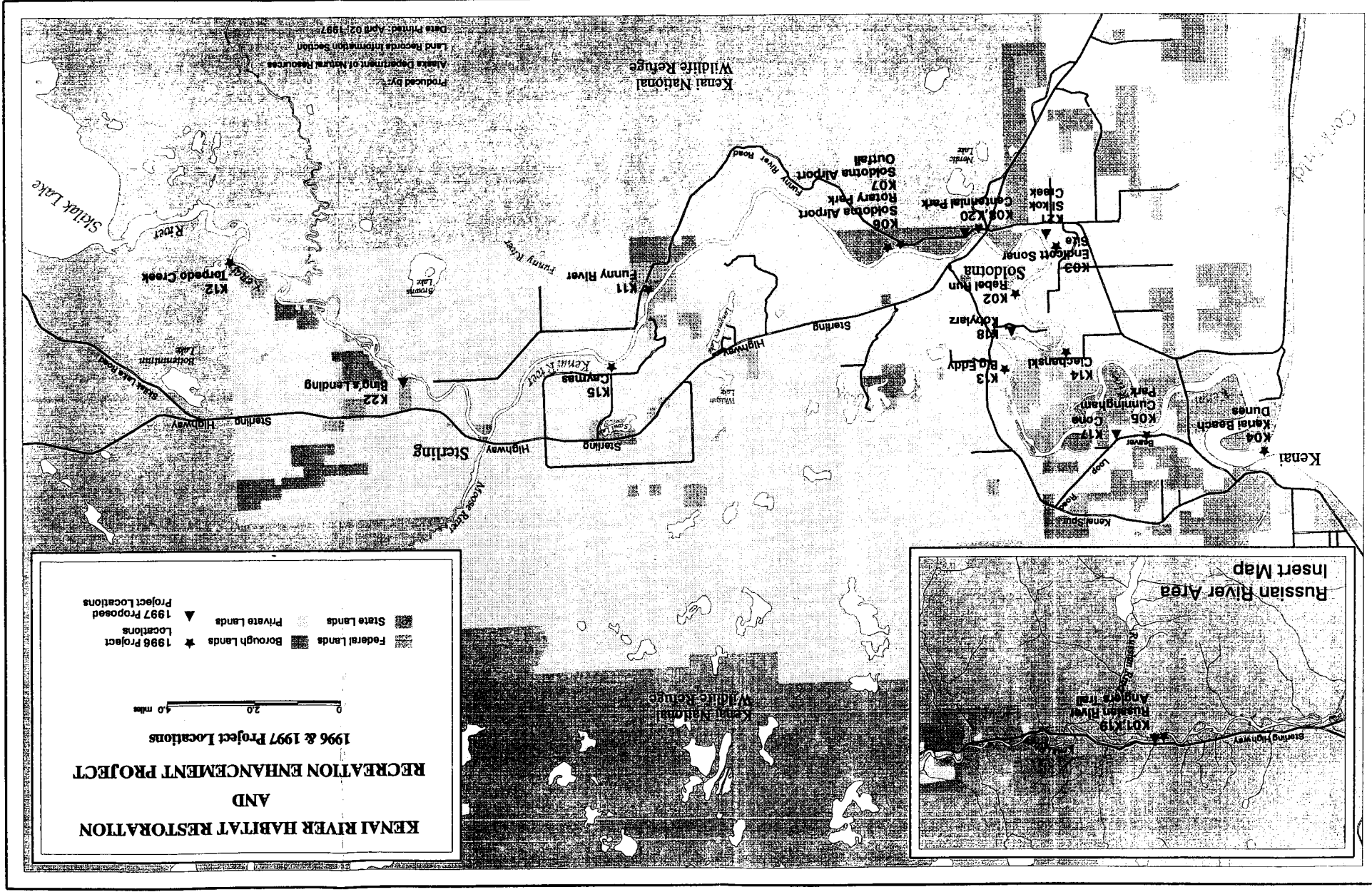


Figure 3



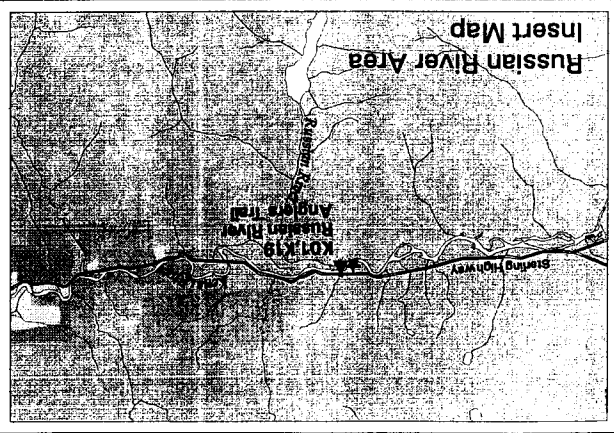


**KENAI RIVER HABITAT RESTORATION  
AND  
RECREATION ENHANCEMENT PROJECT**

**1996 & 1997 Project Locations**

Federal Lands  
 Borough Lands  
 Private Lands  
 1998 Project Locations  
 1997 Proposed Project Locations

0      20      40 miles



Produced by:  
 Alaska Department of Natural Resources  
 Land Records Information Section  
 Data Printed: April 02, 1997

Kenai National  
 Wildlife Refuge