

**ALASKA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER**

**Administrative Report 92-2**

**PROJECT MANAGEMENT REPORT  
Kenai Peninsula Ground-Water Investigations, Phases II and III  
Fiscal Year-end 1992**

by

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**KENAI GROUNDWATER PROJECT**  
**Potential 1993 project activities**

**Goals**

The goals for 1993 will be to conclude Phase II and Phase III project work already underway. Review-ready copies of all reports would be completed and distributed by December 31, 1993, which includes parts of the State, Federal and KPB 1994 fiscal years.

**Phase II tasks:**

**Estimated cost<sup>2</sup>**

*Alaska Hydrologia Survey*

- |  |              |
|--|--------------|
| 1. Continue entering water well log data into GWSI | \$50,000 (S) |
| 2. Map locations of public supply wells            | \$40,000 (h) |
| 3. Project management                              | \$ 6,400 (S) |

*Division of Geological and Geophysical Surveys*

- |                                       |              |
|---------------------------------------|--------------|
| 4. Perform regional geologic analysis | \$35,000 (S) |
|---------------------------------------|--------------|

*U.S. Geological Survey*

- |  |               |
|--|---------------|
| 5. Support GWSI work                       | \$50,000 (S)  |
| 6. Complete draft report of regional study | \$128,000 (h) |

**Phase III tasks:**

*Alaska Hydrologic Survey*

- |   |              |
|---|--------------|
| 1. Revise, edit and publish Sterling report           | \$10,000     |
| 2. Release Nikiski water table and water quality maps | \$50,000     |
| 3. Confined aquifer analysis at Nikiski               | \$29,000     |
| 4. Anchor Point aquifer delineation                   | \$20,000 (S) |

*Division of Geological and Geophysical Surveys*

- |   |              |
|---|--------------|
| 5. Sterling and Nikiski 1:25000 geologic maps (7) | \$40,000 (S) |
| 6. Anchor Point geologic mapping                  | \$10,000 (S) |

<b>Total Estimated Cost</b>	<b>\$468,400</b>
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<sup>2</sup> (S) denotes funding is secure  
(h) denotes half of funding is secure

5. Completed field mapping, sampling and analytical work for regional geologic analysis (DGGS).

**PHASE III**

1. Completed draft report summarizing 1991 water quality data collected at Nikiski;
2. Prepared working maps showing water-table and shallow ground-water flow directions at Nikiski;
3. Prepared working maps showing concentrations of key water quality parameters (benzene, arsenic, iron, nitrate, conductivity, chloride, hardness, and pH) at Nikiski.

KENAI PENINSULA GROUNDWATER STUDIES, PHASES II AND III

Secured Sources of Funding, FY 1993

1. Anchor Point contract (from AASWCD)	\$15,000
2. Kenai Peninsula Borough	\$50,000
3. Alaska Hydrologic Survey	\$66,400
4. Division of Geological and Geophysical Surveys	\$80,000
5. Public well Inventory matching funds (USGS and AHS)	\$20,000
6. U.S. Geological Survey (matching funds)	\$64,000
7. U.S. Geological Survey (GWSI)	<u>\$50,000</u>
<b>Subtotal</b>	<b>\$345,400</b>

**BUDGET GAP**

Total project cost	\$468,400
Secured funding	<u>-<del>\$345,400</del></u>
<b>Budget gap</b>	<b>\$123,000</b>

## INTRODUCTION

This report summarizes work progress and financial status of ground-water studies conducted under the guidance of the Kenai Peninsula Groundwater Task Force during 1992. The primary goal of the ground-water studies is to obtain an understanding of ground-water flow directions, ground-water availability, and natural and man-affected ground-water quality variations on the Kenai Peninsula. This understanding is useful for aquifer cleanups, spill response, planning, permitting, water source development and aquifer protection.

Potential work tasks and funding sources for FY93 are also included in this report. Detailed project descriptions can be found in Phase II and Phase III project plans, which are available from the project manager or task force members. This report is primarily intended to guide discussion and understanding of the ground-water studies by the task force.

## FY92 SOURCES OF FUNDING

Kenai Peninsula Borough		\$50,000	
Oil and Gas and Agricultural Chemical Industries			
ARCO Alaska, Inc	\$12,500		
Phillips Petroleum Co.	\$ 6,600		
Unocal Chemicals	\$10,000		
Unocal Oil and Gas	<u>\$10,000</u>		
Subtotal	\$39,100	\$39,100	
Alaska Hydrologic Survey			\$179,200
U.S. Geological Survey			
Oil and Gas matching funds	\$39,100		
GWSI matching funds	<u>\$73,900</u>		
Subtotal	\$113,000	\$113,000	
Alaska DQGS			<u>\$65,000</u>
TOTAL FUNDING			\$448,300

## MAJOR ACHIEVEMENTS

PHASE II

1. Entered 582 water well logs into Ground-Water Site Inventory system (USGS and AHS). Two-yr total of 1375 new entries combined with 1770 pre-project sites yields 3145 total sites in the database;
2. Compiled water quality data from DEC into database (AHS);
3. Sampled seven additional wells on the Kenai Peninsula (USGS);
4. Compiled and began evaluating USGS historic and 1991 field season water quality data on the Kenai Peninsula (USGS);