

PRINCIPAL INVESTIGATORS - STATE COUPLED PROGRAM
January, 1980

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THE STATE COUPLED TEAM

DOE-HEADQUARTERS (Washington) - Gerald P. Brophy (202-633-9491)
Program planning, guidance, priorities.

DOE-IDAHO FALLS OPERATIONS - Leland L. Mink (208-526-0638)
Program implementation, contracting, management.

STATE CONTRACTORS
Performance of state project.

UNIVERSITY OF UTAH RESEARCH INSTITUTE (UURI) - Duncan Foley (801-581-5283)
LOS ALAMOS SCIENTIFIC LABORATORY (LASL) - William Laughlin (505-667-6711)
GRUY FEDERAL - Joel Renner (703-892-2700)
VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (VPI) - John K. Costain (703-961-5096)
Management assistance to DOE, exploration, and technology development.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) - Paul J. Grim (303-499-1000)
Publishing state resource maps.

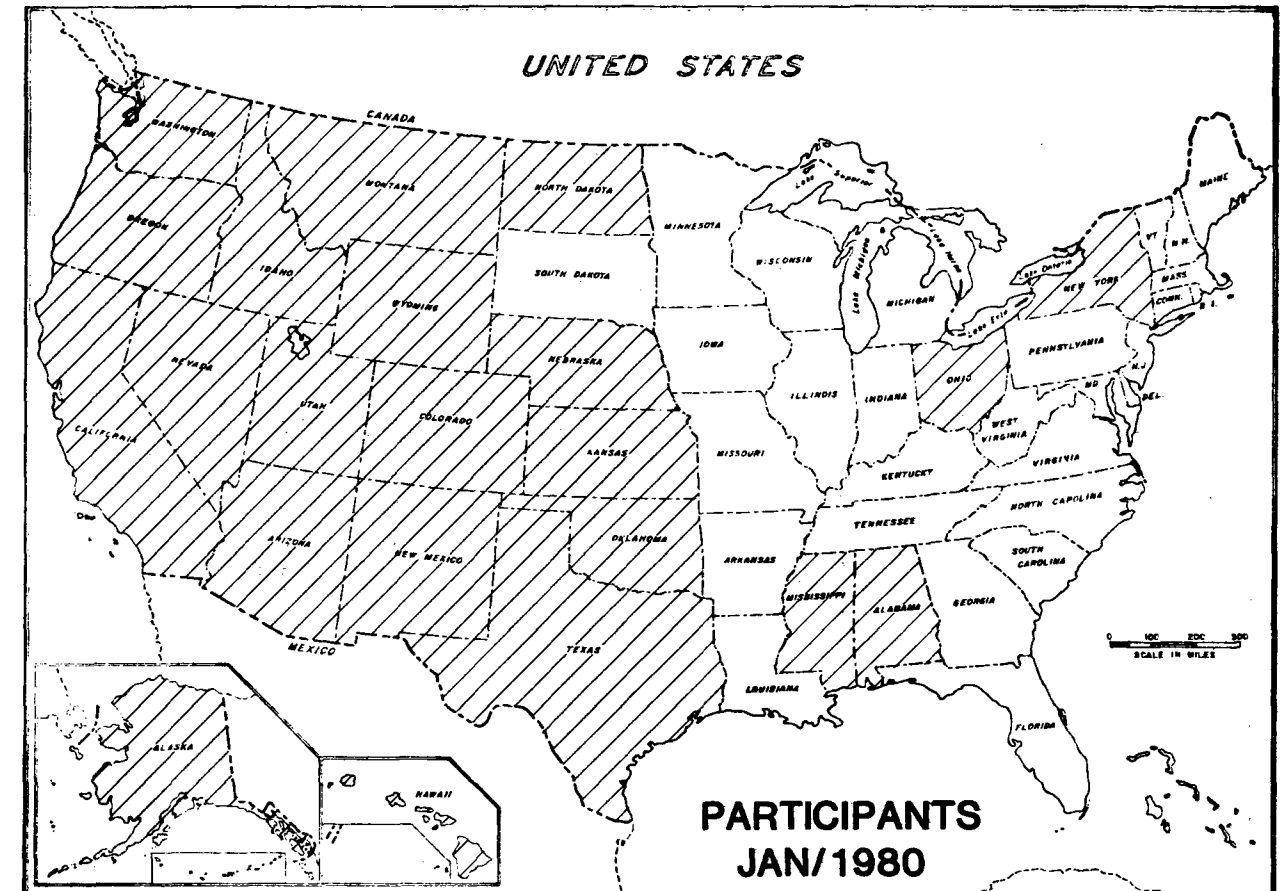
U. S. GEOLOGICAL SURVEY (USGS) - Marshall Reed, James R. Swanson (415-323-8111)
Assessment of U. S. Geothermal resources and computer storage of geothermal data.

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Utah	J. Wallace Gwynn	801-581-6831
Washington	J. Eric Schuster	206-753-5327
Wyoming	Edward R. Decker	307-766-3278

THE STATE COUPLED PROGRAM

LOW-AND MODERATE-TEMPERATURE GEOTHERMAL RESOURCES



U.S. DEPARTMENT OF ENERGY
DIVISION OF GEOTHERMAL ENERGY



PROGRAM JUSTIFICATION

Until the recent energy crisis there has been very little interest in direct uses of geothermal energy. Therefore, little geothermal exploration has been done to date. Present data indicate that the total geothermal resource base in the U.S. is very large (U. S. Geological Survey Circular 790 -- Assessment of United States Geothermal Resources - 1978). Many geothermal resources remain to be discovered and developed.

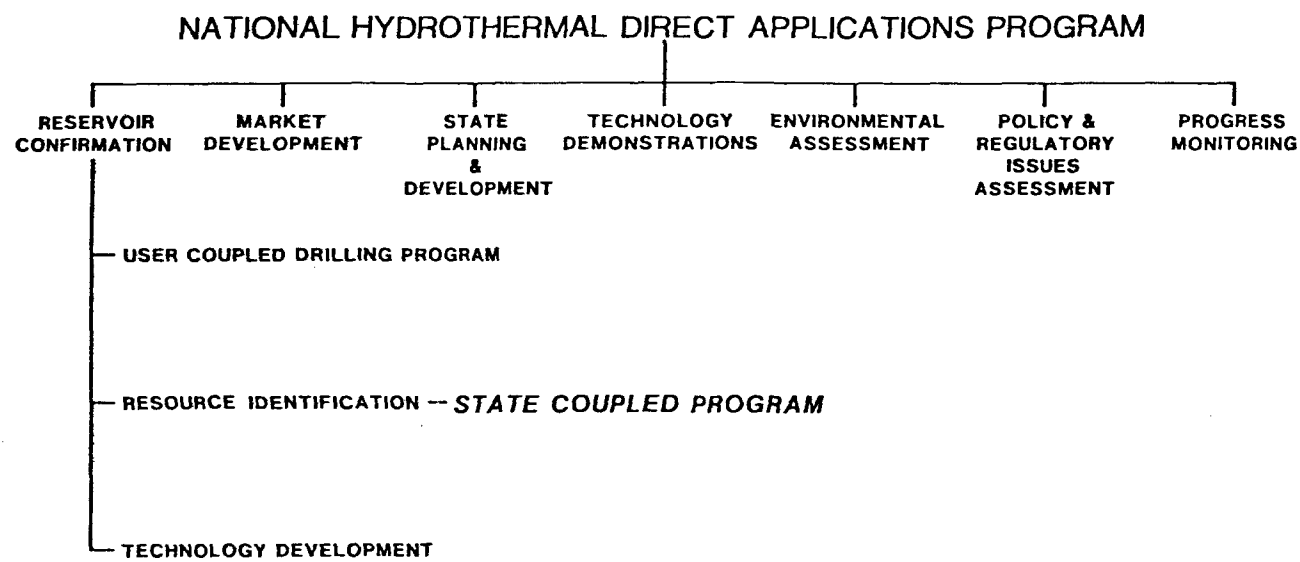
OBJECTIVE

The objective of DOE's State Coupled Program is IDENTIFICATION OF GEOTHERMAL RESOURCE AREAS. The data generated by this program are:

1. Published as maps and reports for the benefit of prospective users, and;
2. Transmitted to the U. S. Geological Survey for their analysis in assessing geothermal resources in the United States.

RELATIONSHIP TO NATIONAL DIRECT APPLICATIONS PROGRAM

The State Coupled Program is an integral component of the



State Resource Teams work closely with State Commercialization Planning Teams, whose job is to facilitate development of geothermal resources (under State Planning and Development).

PHASE I
(IMMEDIATE PRIORITY)

DIRECT DETECTION OF THERMAL WATERS IS EMPHASIZED

Direct detection is quick and inexpensive. Simple techniques such as analyzing available temperature data and collecting new temperature data from springs and wells are effective in discovering resources. Many reported temperature measurements are inaccurate. Many wells lack measured temperature.

BASIC TASKS ARE:

- Compilation of Available Data & New Measurements
 - temperature of springs
 - temperature in wells
 - temperature gradients
 - water quality
 - aquifer productivity
 - related geology
- Publication of Maps & Reports
 - for use by the general public
 - to facilitate geothermal development

PHASE II
(SUBSEQUENT PRIORITY)

INDIRECT DETECTION OF THERMAL WATERS IS EMPHASIZED

Indirect detection is more expensive and more risky. Although indirect indicators are needed to find hidden resources, exploration for hidden resources is pursued only after direct detection of more obvious resources is substantially complete.

BASIC TASKS ARE:

- Performance & Analysis (as appropriate)
 - heat flow
 - chemical geothermometry
 - geology
 - geophysics
 - geochemistry
 - hydrology
- Publication of Maps & Reports
 - for use by the general public and by earth scientists
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THE STATE COUPLED PROGRAM

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Program planning, guidance, priorities.

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STATE CONTRACTORS
Performance of state project.

UNIVERSITY OF UTAH RESEARCH INSTITUTE (UURI) - Duncan Foley (801-581-5283)
LOS ALAMOS SCIENTIFIC LABORATORY (LASL) - A. William Laughlin (505-667-6711)
GRUY FEDERAL - Joel L. Renner (703-892-2700)
Management assistance to DOE.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY (VPI) - John K. Costain (703-961-5096)
Exploration and technology development for Atlantic Coastal Plain.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) - Paul J. Grim (303-499-1000)
Publishing state resource maps.

U. S. GEOLOGICAL SURVEY (USGS) - Marshall J. Reed, James R. Swanson (415-323-8111)
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PARTICIPATING STATES

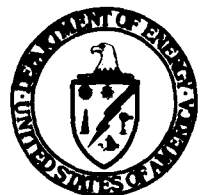
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 Individual State Contracts
 University Contracts Covering Several States

U.S. DEPARTMENT OF ENERGY
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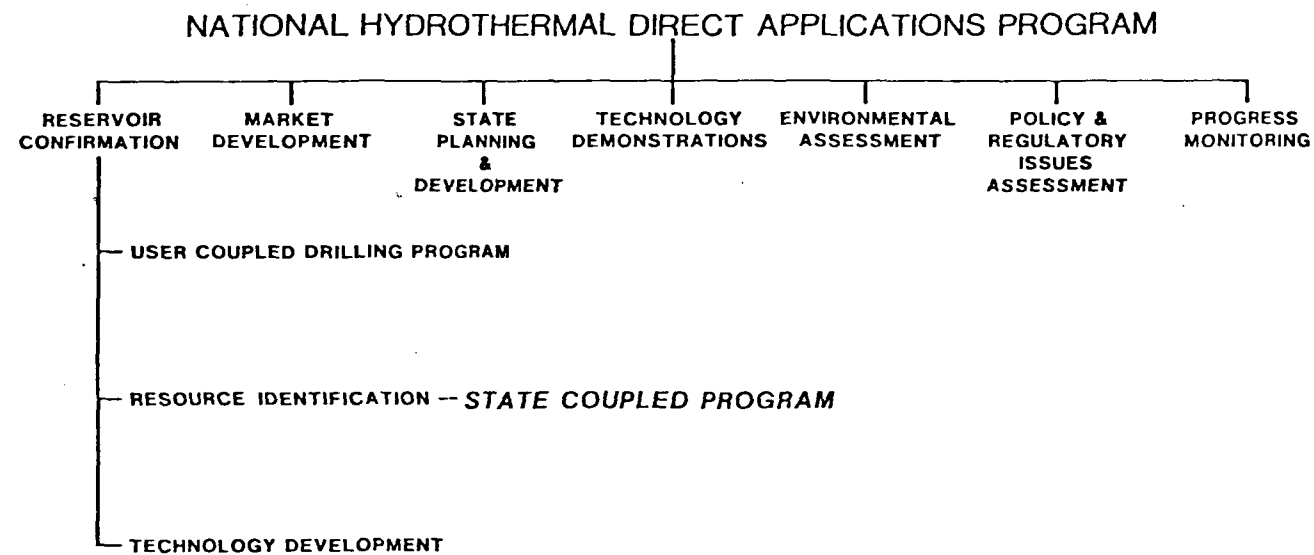
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