

NORTH AMERICAN WEATHER CONSULTANTS OPERATIONAL CLOUD SEEDING PROGRAMS Partial Listing (through February 2008)

Project Area: **Gunnison County, Colorado**
 Sponsor: Gunnison County
 Technique: Ground based silver iodide seeding
 Time Period: 2003-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Little Cottonwood Canyon, Utah**
 Sponsor: Alta and Snowbird Ski Areas
 Technique: Ground based silver iodide seeding
 Time Period: 1996 - present
 Goal: Enhanced winter snowfall for skiing

Project Area: **Wellsville and Wasatch Mountains of Northern Utah**
 Sponsor: Utah Division of Water Resources and Cache County
 Technique: Ground based silver iodide seeding
 Time Period: 1997 - 2000, 2002-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Upper Ogden River and Lost Creek Watersheds, Utah**
 Sponsor: Weber Basin Water Conservancy District and Utah Division of Water Resources
 Technique: Ground based and airborne silver iodide seeding
 Time Period: 1991 - 1993
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Upper San Joaquin River Drainage, Southern Sierra Nevada of California**
 Sponsor: Southern California Edison Company
 Technique: Ground based and airborne silver iodide seeding with radar surveillance
 Time Period: 1951 - 1987 and 1990 - 1992
 Goal: Enhanced winter and summer precipitation for hydroelectric power production

Project Area: **Mountain Watersheds in Central and Southern Utah**
 Sponsor: Utah Water Resources Development Corporation
 Utah Division of Water Resources, 13 Utah
 Counties
 Technique: Airborne and ground based silver iodide seeding
 Time Period: 1973 - 1983, 1987, 1988-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Bear Lake Drainage, Smith & Thomas Forks, Southwestern Wyoming and Southeastern Idaho**
 Sponsor: Utah Power and Light Company
 Technique: Ground based silver iodide seeding
 Time Period: 1954 - 1970; 1979 - 1982, 1989 - 1990
 Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: **Santa Barbara County, California**
 Sponsor: Santa Barbara County Water Agency
 Technique: Ground based and airborne silver iodide seeding with radar surveillance; ground-based flare seeding
 Time Period: 1950-1953; 1955; 1956-1960; 1978; 1982 - 1997, 2002-2007
 Goal: Enhanced winter precipitation for municipal and agricultural water supplies

Project Area: **Grouse Creek, Raft River, Wellsville and Wasatch Mountains of Northern Utah**
 Sponsor: Utah Water Resources Development Corporation, Utah Division of Water Resources, and Cache and Box Elder Counties
 Technique: Ground based silver iodide seeding
 Time Period: 1989 - 1997, 2001-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Provo and Weber River Drainages in Western Uinta Mountains of Utah**
 Sponsor: Utah Water Resources Development Corporation, Utah Division of Water Resources, Provo River Water Users Association and Weber Basin Water Conservancy District
 Technique: Ground based silver iodide seeding
 Time Period: 1989 - 1995, 2000-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Wasatch Mountains in Eastern Salt Lake County, Utah**
 Sponsor: Utah Water Resources Development Corporation; Utah Division of Water Resources; Salt Lake City Water Division; and Alta, Brighton, and Snowbird Ski Areas
 Technique: Ground based silver iodide seeding
 Time Period: 1989 - 1996
 Goal: Enhanced winter precipitation for municipal water supplies

Project Area: **Upper Kings River Drainage in the Southern Sierra Nevada of California**
 Sponsor: Kings River Conservation District and Kings River Water Users Association
 Technique: Airborne and ground based silver iodide seeding with radar surveillance
 Time Period: 1989 - 1993, 2007-present
 Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: **Upper Feather River Drainage in the Northern Sierra Nevada of California**
 Sponsor: California Department of Water Resources
 Technique: Airborne silver iodide seeding with radar surveillance
 Time Period: 1989
 Goal: Enhanced winter precipitation for municipal and irrigation water supplies

<p>Project Area: Grand Mesa and West Elk Mountains of Western Colorado</p> <p>Sponsor: Grand Mesa Water Users Association</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1990 - 1991</p> <p>Goal: Enhanced winter precipitation for irrigation water supplies</p>	<p>Goal: Enhanced winter precipitation for municipal water supplies</p>
<p>Project Area: San Gabriel Mountains, California</p> <p>Sponsor: Los Angeles County Flood Control District</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1959 - 1973, 1991 - 1993, 1997-2001</p> <p>Goal: Enhanced winter precipitation for municipal water supplies</p>	<p>Project Area: Chixoy River Drainage, Guatemala, C. A.</p> <p>Sponsor: Empresa Electrica and Instituto Nacional de Electrificacion</p> <p>Technique: Airborne and ground based silver iodide seeding with radar surveillance</p> <p>Time Period: 1991, 1992, 1994</p> <p>Goal: Enhanced summer precipitation for hydroelectric power production</p>
<p>Project Area: Bannock, Portneuf and Bear River Mountain Ranges of Southeastern Idaho</p> <p>Sponsor: Bear River RC&D and Bannock, Bear Lake, Caribou, Franklin, and Oneida Counties</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1988 - 1989, 1992, 1993</p> <p>Goal: Enhanced winter precipitation for irrigation water supplies</p>	<p>Project Area: El Cajon Drainage Basins, Honduras, C. A.</p> <p>Sponsor: Empresa Nacional De Energia Electrica</p> <p>Technique: Airborne and ground based silver iodide seeding with radar surveillance</p> <p>Time Period: 1993, 1994, 1995, 1997</p> <p>Goal: Enhanced summer precipitation for hydroelectric power production</p>
<p>Project Area: Uinta Mountains of Northeastern Utah</p> <p>Sponsor: Uinta County, Duchesne County and Utah Division of Water Resources</p> <p>Technique: Airborne and ground based silver iodide seeding</p> <p>Time Period: 1977, 1989, 2003-present</p> <p>Goal: Increased winter spring, and summer precipitation for irrigation water supplies</p>	<p>Project Area: Tsengwen Dam Drainage, Taiwan</p> <p>Sponsor: Taiwan Central Weather Bureau</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1992, 1994</p> <p>Goal: Enhanced summer precipitation for irrigation water supplies</p>
<p>Project Area: Boise River Drainage, Idaho</p> <p>Sponsor: Boise Project Board of Control</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1992 - 1996, 2002-2005, 2007-present</p> <p>Goal: Enhanced winter precipitation for irrigation water supplies and hydroelectric power production</p>	<p>Project Area: West Central Texas Near San Angelo</p> <p>Sponsor: City of San Angelo, Texas</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1985, 1986, 1987, 1988</p> <p>Goal: Enhanced summer precipitation for municipal water supplies</p>
<p>Project Area: Willow Creek Drainage, Colorado</p> <p>Sponsor: Northern Colorado Water Conservancy District</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1992 - 1995</p> <p>Goal: Enhanced winter precipitation for irrigation water supplies</p>	<p>Project Area: Edwards Plateau Northwest of San Antonio</p> <p>Sponsor: Edwards Underground Water District, San Antonio, Texas</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1985, 1986</p> <p>Goal: Enhanced summer precipitation for municipal water supplies</p>
<p>Project Area: Higher Elevation Watersheds of Nine Eastern Idaho Counties and One Western Wyoming County</p> <p>Sponsor: High Country RC&D</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1993, 1995</p> <p>Goal: Enhanced winter precipitation for irrigation water supplies</p>	<p>Project Area: South Central Texas North of Corpus Christi</p> <p>Sponsor: City of Corpus Christi, Texas</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1985</p> <p>Goal: Enhanced summer precipitation for municipal water supplies</p>
<p>Project Area: Santa Clara County, California</p> <p>Sponsor: Santa Clara Valley Water District</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1992</p> <p>Goal: Enhanced winter precipitation for municipal water supplies</p>	<p>Project Area: Pine Valley Mountains in Southwestern Utah</p> <p>Sponsor: Washington County Water Conservancy District and Utah Division of Water Resources</p> <p>Technique: Ground based silver iodide seeding</p> <p>Time Period: 1985-1987</p> <p>Goal: Enhanced winter precipitation for municipal and irrigation water supplies</p>
<p>Project Area: Mornos River Drainage, Greece</p> <p>Sponsor: Greater Athens Water Authority</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1992, 1993</p>	<p>Project Area: Southern Delaware</p> <p>Sponsor: Delaware Department of Agriculture</p> <p>Technique: Airborne silver iodide seeding with radar surveillance</p> <p>Time Period: 1985</p> <p>Goal: Enhanced summer precipitation for agricultural water supplies</p>

Project Area: Abu Dhabi, United Arab Emirates
Sponsor: Abu Dhabi Municipality
Technique: Airborne silver iodide seeding with radar surveillance
Time Period: 1982
Goal: Enhanced winter precipitation for agricultural water Supplies

Project Area: Catalina Island, California
Sponsor: Southern California Edison, Co.
Technique: Airborne silver iodide seeding with radar surveillance
Time Period: 1977 - 1978
Goal: Enhanced winter precipitation for municipal water supplies

Project Area: Bulloch County, Eastern Georgia
Sponsor: Drought Relief Fund
Technique: Airborne silver iodide seeding with radar Surveillance
Time Period: 1977
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Southern Georgia
Sponsor: Southern Georgia Rain Gain
Technique: Airborne silver iodide seeding with radar surveillance
Time Period: 1977
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Burke County, Eastern Georgia
Sponsor: Burke County
Technique: Airborne silver iodide seeding with radar surveillance
Time Period: 1977
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Polk County, Oregon
Sponsor: Polk County
Technique: Airborne dry ice seeding
Time Period: 1977
Goal: Enhanced winter precipitation for agricultural water supplies

Project Area: Deschutes River Drainage, Central Oregon
Sponsor: Portland General Electric Company
Technique: Ground based silver iodide seeding
Time Period: 1964-1965; 1974-1976
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Chelan Lake Drainage, Central Washington
Sponsor: Chelan Public Utility District
Technique: Airborne dry ice seeding
Time Period: 1976 - 1977
Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: Baker River Drainage, Northern Washington
Sponsor: Puget Power Company
Technique: Airborne dry ice seeding

Time Period: 1976 -1977
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Skagit River Drainage, Northern Washington
Sponsor: Seattle City Light Company
Technique: Airborne dry ice seeding
Time Period: 1976 - 1977
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Lake Spalding Drainage, in the Northern Sierra Nevada of California
Sponsor: Pacific Gas and Electric Company
Technique: Airborne silver iodide seeding
Time Period: 1976 - 1977
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Heritage and Mona Reservoir Areas, Central Jamaica
Sponsor: Kingston Water Commission
Technique: Airborne silver iodide seeding
Time Period: 1976
Goal: Enhanced summer precipitation for municipal water supplies

Project Area: Port of Ensenada, Mexico
Sponsor: Insisa
Technique: Ground based silver iodide seeding
Time Period: 1970 - 1976
Goal: Enhanced winter precipitation for municipal water supplies

Project Area: Northwestern South Dakota
Sponsor: South Dakota Weather Control Commission
Technique: Airborne silver iodide seeding
Time Period: 1975
Goal: Enhanced summer precipitation and hail suppression for agricultural crops

Project Area: Coeur D'Alene Lake Watershed, Northern Idaho
Sponsor: Washington Water and Power Company
Technique: Ground based silver iodide seeding
Time Period: 1950-1951; 1952-1960; 1966-1971; 1973-1974
Goal: Enhanced fall - early winter precipitation for hydroelectric power production

Project Area: Hungry Horse Reservoir Area, Northwestern Montana
Sponsor: Bonneville Power and Light Company
Technique: Ground based silver iodide seeding
Time Period: 1966 - 1971
Goal: Enhanced winter precipitation for hydroelectric power generation

Project Area: San Benito County, California
Sponsor: San Benito County
Technique: Ground based silver iodide seeding
Time Period: 1964 - 1966
Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: Owyhee Reservoir, Southwestern Idaho
Sponsor: Board of Control - Owyhee Project
Technique: Ground based silver iodide seeding

Time Period: 1954-1956; 1959-1962
Goal: Enhanced winter precipitation for irrigation water supplies

Project Area: Ventura County, California
Sponsor: Ventura County
Technique: Ground based silver iodide seeding
Time Period: 1957 - 1960
Goal: Enhanced winter precipitation for irrigation and municipal water supplies

Project Area: Santa Ana River Basin, California
Sponsor: Santa Ana River Weather Corporation
Technique: Ground based silver iodide seeding
Time Period: 1956 - 1960
Goal: Enhanced winter precipitation for municipal water supplies

Project Area: Lake Almanor Drainage, in the Northern Sierra Nevada of California
Sponsor: Pacific Gas and Electric Company
Technique: Ground based silver iodide seeding
Time Period: 1952 - 1960
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Mokelumne & Stanislaus Rivers, in the Central Sierra Nevada of California
Sponsor: Pacific Gas and Electric Company
Technique: Ground based silver iodide seeding
Time Period: 1952 - 1960
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Campbell River Drainage, British Columbia
Sponsor: British Columbia Hydro Company
Technique: Ground based silver iodide seeding
Time Period: 1954 - 1960
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Southern Cascades, Oregon
Sponsor: California-Oregon Power Company
Technique: Ground based silver iodide seeding
Time Period: 1951 - 1960
Goal Period: Enhanced winter precipitation for hydroelectric power production

Project Area: Crane Valley in the Central Sierra Nevada of California
Sponsor: Pacific Gas and Electric Company
Technique: Ground based silver iodide seeding
Time Period: 1954 - 1959
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: San Diego County, California
Sponsor: San Diego County Weather Corporation
Technique: Ground based silver iodide seeding
Time Period: 1950-1951; 1956-1957
Goal: Enhanced winter precipitation for municipal water supplies

Project Area: Ocean Falls, British Columbia
Sponsor: Crown-Zellerbach Paper Company
Technique: Ground based silver iodide seeding
Time Period: 1955 - 1957
Goal: Enhanced winter precipitation for hydroelectric power production

Project Area: Decatur and Clarke Counties, Iowa
Sponsor: The Decatur County Weather Modification Association
Technique: Ground based silver iodide seeding
Time Period: 1957
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Greene, Boone and Story Counties, Iowa
Sponsor: Central Iowa Modification Association
Technique: Ground based silver iodide seeding
Time Period: 1957
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Dallas County, Iowa
Sponsor: Dallas County Weather Modification Group
Technique: Ground based silver iodide seeding
Time Period: 1957
Goal: Enhanced summer precipitation for agricultural water supplies

Project Area: Southeastern Idaho
Sponsor: Salmon River Canal Company, Oakley Canal Company, Cedar Mesa Reservoir and Canal Company
Technique: Ground based silver iodide seeding
Time Period: 1953 - 1955
Goal: Enhanced winter precipitation for irrigation water supplies