



Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan

Weather Modification Working Group Meeting

**Meeting Summary
August 12, 2009
3:00 p.m. – 7:00 p.m.
Chubbuck City Council Chambers
5160 Yellowstone Avenue
Chubbuck, ID 83202**

Overview

The Weather Modification Working Group achieved the following during their August 12, 2009 meeting:

1. Group understanding of the keys to a successful cloud seeding program on the Payette, the current situation surrounding silver toxicity concerns and information on cloud seeding potential in other basins, principally the upper Snake basin.
2. Group agreement on an Idaho Power-led weather modification program in the upper Snake basin under the umbrella of the ESPA CAMP.
3. Group agreement on the integration of existing county and local cloud seeding programs and the CAMP program in the Upper Snake, under direction of Idaho Power Company.
4. Understanding of the 2009 cloud seeding efforts in the Upper Snake
5. Agreement on the 2009-2010 objectives and goals, including an increase in the number of remote ground generators contributed by Idaho Power to approximately ten along with the development and assessment of an appropriate monitoring program with an independent review component, for consideration by the Work Group.

The outcomes of these discussions are included in this meeting summary.

Update on Weather Modification Program

Sean Parkinson (Idaho Power) presented a detailed analysis of the Payette Cloud Seeding Project and projections for the development and enhancement of an Upper Snake Cloud Seeding Program; an overview of the IPC's meteorology support; 2009-2010 objectives, including activities planned for eastern Idaho in 2010; and an update on the silver toxicity issue.

Objectives for 2010 in the Upper Snake:

1. Redesign remote generators
2. Add 7 generators to the Upper Snake for a total of 10 generators
3. Locations need to be identified
4. Continued meteorology support
5. Consideration of additional generators for 2010-2011
6. Develop target-control analysis for Eastern Idaho
7. Assess benefits of additional radiometer
8. Develop sampling plans

Additional Technical Points

- Weather modification program of IPC is long-term and is supported by evidence in the Payette and across the country.
- Unless weather modification is implemented incorrectly, there is no downwind negative (or positive) impact.
- Dual airborne and ground based programs are most effective because it allows for flexibility depending on the location of moisture and temperature during the storm. (However, the feasibility of an aircraft program in the Upper Snake is still being studied.)
- Remote generators are much more effective and efficient than manual ones.

Integration of County-run Weather Modification Program into the ESPA Plan

IPC will continue to develop relationships and work cooperatively with the counties and local entities that are engaged in weather modification programs in the upper Snake basin. The weather modification working group will continue to serve as the forum for discussing issues including understanding the financial relationships with the county program and the ESPA Plan.

Next Steps

| Action | Responsible |
|--|--------------------------|
| Develop a draft budget for the 5 year weather modification pilot program (including o & m, including an additional expenses line for aerial support) | IPC |
| Develop a draft monitoring plan for the program – that may use a 3rd party for technical support/oversight to lend credibility to the program. | IPC |
| Continue coordination with Wyoming at the ‘grass-roots’ level | IDWR |
| Determine how many storms may have been missed as a result of a smaller program in 2009 and prepare an estimate the amount of precipitation not realized during a storm. | IPC |
| Evaluate the budget, and determine the best course of action for potential “credits” for IPC weather modification efforts under the ESPA Plan. | WG |
| Develop a formal relationship regarding the implementation of a weather modification program between IWRB and IPC under the ESPA Plan | WG members, IWRB and IPC |
| Develop a one-sheet and FAQ on weather modification as part of the education effort and consider an out-reach program to educate local communities and citizens on the weather modification program. | CDR & WG |

Meeting Materials Distributed/Presented

- Idaho Power CS Program Summary 2009

Next Meeting: Thursday, September 3rd 10:00 a.m. to 12 noon (Teleconference)

List of Participants

Weather Modification Working Group

| NAME | AFFILIATION |
|----------------------|-----------------------|
| Mayor Jared Furhiman | City of Idaho Falls |
| Jim Tucker | Hydropower |
| Mayor Steve England | City of Chubbuck |
| Rich Rigby | Agency representative |

Ex Officio Members & Other Attendees

| NAME | AFFILIATION |
|------------------|-----------------------------|
| Barry Burnell | Water Quality Administrator |
| Bill Quinn | IDWR |
| Brian Patton | IDWR |
| Hal Anderson | IDWR |
| Jennifer Graham | CDR Associates |
| Joan Kathol | CDR Associates |
| Jon Bowling | Idaho Power |
| Jonathan Bartsch | CDR Associates |
| Lynn Tominaga | Ground Water Users |
| Sean Parkinson | Idaho Power |