

# Weather Modification Upper Snake Feasibility Study

CAMP Advisory Committee  
March 27, 2008

Hal N. Anderson



# Director Duties

I.C. 42-1805 (10)

“To develop, coordinate and provide, through contract or by other means, for weather modification projects involving cloud seeding that are designed to increase water supplies for the state by enhancing natural precipitation and which conform to state water planning objectives.”



# Director Duties

I.C. 42-1805 (10) cont'd

“To accomplish these purposes the director is authorized to accept and use funds acquired through legislative appropriation or by gift, grant, contribution or funding received from any private or public individual or entity.”





# Director Duties

I.C.42-1805 (11)

“To develop and implement a plan for data gathering to determine any effect of the weather modification efforts in which the department is involved.”



# ESPA Management Options

- Managed Recharge
- Incidental Recharge
- Site-Specific Augmentation
- Additional Surface Water Storage and Weather Modification
- Conversions – Groundwater to Surface Water
- Exchange for water acquired or leased from below Milner
- Voluntary Demand Reduction, market based



# Weather Mod RFP

- Weather Modification feasibility study identified in Framework Plan funding request.
- Solicitation was sent out summer 2007.
- Four responses received.
- North American Weather Consultants, Sandy Utah, selected.





# Purpose of Study

Assess the feasibility of conducting weather modification (cloud seeding) programs in the Upper Snake River Basin for winter snowpack augmentation.



# Study Scope

- Task 1-Review and Summary of Prior Studies and Research.
- Task 2- Review and Analysis of Climatology of Target Area.
- Task 3-Development of Preliminary Program Design.
- Task 4-Establishment of Program Operational Criteria.





## Scope (cont'd)

- Task 5-Development of monitoring and evaluation methodology.
- Task 6-Review of environmental and legal aspects.
- Task 7-Development of cost estimates.
- Task 8-Final report preparation
- Task 9-Coordination meetings and presentations.



# Study Completion

- Scheduled for September 2008.
- Added a new task to evaluate the effectiveness of the County effort for 2007/2008.



# IDWR Perspective

- Weather Modification is conceptually defensible and has documented successes.
- Quantification of effectiveness is very difficult and significant reproducibility is lacking (NAS).
- Weather Modification can increase water supplies but is not a drought busting mechanism.





# IDWR Perspective

- Seeding material must be reliably produced and transported into the region of the clouds with supercooled liquid water.
- Not all clouds or storm events should be seeded.
- An effective program needs to be well designed and managed by qualified and experienced operators.



# IDWR Perspective

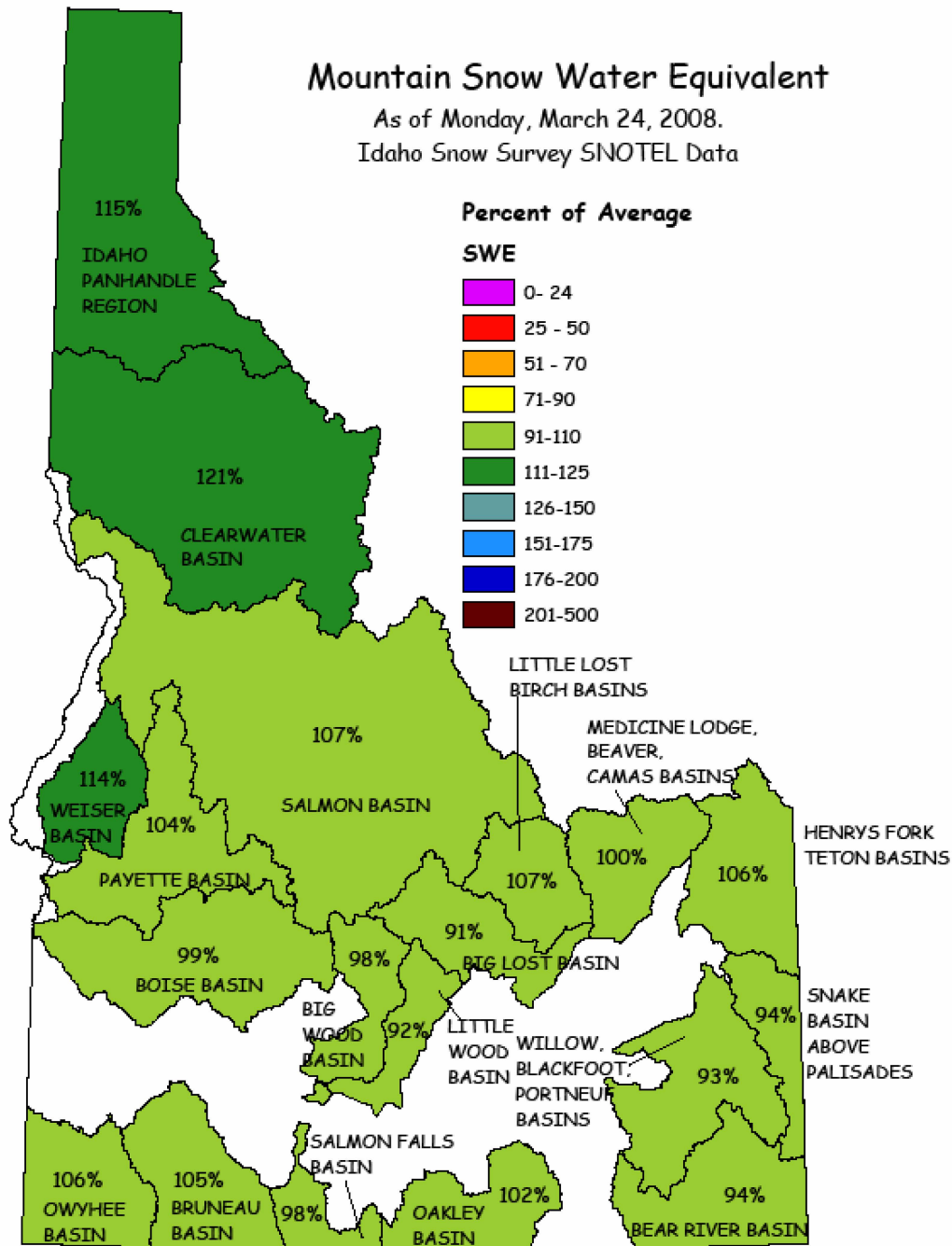
- Past effort in 1992 provided matching funds given a proposed plan that incorporated qualified operators.
- Local interest and financial support is necessary to implement an operational program.
- Currently there is no state appropriated weather modification funding.



# Mountain Snow Water Equivalent

As of Monday, March 24, 2008.

Idaho Snow Survey SNOTEL Data





Questions ?

