

## AQUIFER STABILIZATION FRAMEWORK

1. **Objective:** Stabilize the ESPA in a manner that keeps as many acres of farmland in production, and as many businesses in operation, as possible.
2. **Management Framework:** Develop a management plan, implement the plan, observe groundwater levels, adjust plan as needed to achieve and maintain stabilization.
3. **Management Plan Overview** (additional details below)
  - 3.1 Water in:
    - (a) Preserve incidental recharge.
    - (b) Expand managed aquifer recharge.
    - (c) Increase inflows from tributary basins.
    - (d) Continue cloud seeding.
  - 3.2 Water out:
    - (a) Expand conversions.
    - (b) Implement an achievable and enforceable diversion reduction program.
    - (c) Better management tools & incentives.
  - 3.3 Implementation:
    - (a) Pragmatic enforcement process.
    - (b) Designated checkpoints & adjustment process (adaptive management).
    - (c) Stakeholder committee.
      - (i) Monitor plan implementation.
      - (ii) Make adjustments at checkpoints.
      - (iii) Work collectively to develop management tools & incentives.
4. **Water In (Groundwater Augmentation)**
  - 4.1 Preserve incidental recharge.
    - (a) Incentivize incidental recharge.
    - (b) Consider effects of IWRB & USDA infrastructure grants on aquifer stabilization, and encourage state-sponsored recharge to offset impacts.
    - (c) Consider effects of out-of-basin water transfers on aquifer stabilization.
    - (d) Sustain the Milner 0 flow and Two Rivers Doctrine.
  - 4.2 Expand managed aquifer recharge.
    - (a) Increase IWRB goal from 250k AF to 350k AF.
    - (b) Expand recharge capacity above American Falls.
    - (c) Continued state funding of managed aquifer recharge.
    - (d) Leverage state & federal funding to expand aquifer recharge.
    - (e) Incentivize private recharge.
  - 4.3 Increase inflows from tributary basins.
    - (a) Regulate groundwater diversions in tributary basins.
    - (b) Encourage state to take actions needed to regulate tributary basins.
  - 4.4 Continue cloud seeding.
    - (a) Work with Idaho Power and IWRB to ensure cloud seeding continues.
5. **Water Out (Groundwater Conservation)**
  - 5.1 Diversion reduction program:
    - (a) Determine the amount of conservation needed to stabilize the ESPA after accounting for actions to increase inflow to the aquifer.
    - (b) Allocate maximum sustainable yield among user groups.

- (i) User groups determine allocation among patrons, taking into account priority date and other relevant factors.
  - (ii) Groundwater users not represented by IGWA, the cities, or another user group will be allocated a pro rata share.
- 5.2 Management tools:
  - (a) Conservation incentives
    - (i) End-gun removal program
    - (ii) Groundwater conservation easements (Colorado/Kansas)
    - (iii) Modified CREP (conservation without following)
  - (b) Groundwater Market (Fox Canyon/Mammoth Water)
    - (i) Mechanism to meet the water needs of industrial users and other water demands that are not capable of on-farm reductions, and to incentivize the growing of low water use crops.
    - (ii) Develop software specific to ESPA.
- 5.3 Enforcement:
  - (a) Excess allocation may be carried forward. Sideboards to be determined.
  - (b) Excess use must be remedied by purchasing allocation from other users and/or reducing use the following year.
  - (c) If excess use is not remedied the following year, a penalty equal to X% of the excess use will be imposed, and the full amount (excess use + penalty) must be remedied the following irrigation season by following.

## **6. Adaptive Management**

- 6.1 Progress toward aquifer stabilization evaluated at predetermined intervals.
- 6.2 Aquifer stabilization monitored regionally.
  - (a) Define regions.
  - (b) Establish regional groundwater indices.
    - (i) Regional well index vs. regional Mann-Kendall analysis.
    - (ii) Water levels at specific points vs. regional storage change.
- 6.3 Adjust management plan as needed to achieve and maintain stabilization.
  - (a) Adjustments may be made to groundwater augmentation actions based on learned experience and opportunities for enhancement.
  - (b) Adjustments to groundwater conservation program may be made to achieve and maintain aquifer stabilization. Adjustments may not be uniform between regions.
  - (c) Develop relationship between regions.

## **7. Stakeholder Committee**

- 7.1 Meets annually to review progress.
  - (a) Develop reporting process.
- 7.2 At designated intervals, evaluates changes to the management plan that may be appropriate to achieve and maintain aquifer stabilization.
- 7.3 Submits recommended plan amendments to the Director.
- 7.4 Pragmatic dispute resolution process.