

# **ESPA PLAN: MANAGED RECHARGE APPROACH** **USING EXISTING CANAL SYSTEMS**

## **DRAFT – FOR DISCUSSION PURPOSES ONLY**

*February 12, 2010*

### **OVERVIEW OF MANAGED RECHARGE APPROACH\*\*\***

- All participants who pay the ESPA Plan fee are eligible to participate in the Board's managed recharge program (this is not an endorsement of the concept of optional participation in the ESPA Plan)
- Managed recharge wheeling fees for IWRB recharge water are the vehicle to recognize the benefits of all recharge, including incidental recharge. High-loss canals will derive benefit based on their higher capacity to lose water (canals having more capacity translates into more opportunity for them to earn managed recharge wheeling fees)
- Canals that agree to provide managed recharge to implement the ESPA Plan, are provided a preferred status (preferred access to available IWRB recharge water)
- This managed recharge plan will attempt to provide geographic distribution of managed recharge water consistent with the ESPA Plan above and below American Falls, currently estimated at 60% above and 40% below, given canal system capacity and priority of the IWRB water right.
- Approach promotes predictability of recharge delivery and provides a means for Plan budgeting for recharge

### **EXPLANATION OF APPROACH**

1. Establish a 10 year, multi-year, or an annual contract with an option for automatic renewal with any irrigation canal that agrees to participate in the ESPA Plan managed recharge program.
2. Each canal with an IWRB contract will be allocated a proportionate share of anticipated recharge water between the other contracted entities, with first access to available recharge water, i.e. preferred status. The recharge water allocation will be based on a rolling 20-year average, for which data is available, of diversion capacities (cfs) and total annual diversions (acre-feet annually), as depicted in Attachment A.
3. A minimum wheeling fee rate of \$3 per acre foot is recommended.

4. Establish payment to participating canals based on estimates of available recharge water supply and canal recharge capacity and commitment. Both options outlined below are available to participating canals with a 10 year/multi-year contract while Option B is the only option to those holding annual contracts with automatic renewal. Canal companies will only be paid for water actually recharged.
  - a. *Option A:* Consistent with CAMP recharge targets, estimate the potential recharge water supply available over a multi-year period and pay canals seventy-five percent (75%) of the estimated annual amount. An accounting ‘true up’ will occur every other year. The recharge accounting approach will determine the amount actually recharged by each individual canal company and adjustments made (final annual payment paid to participants or a credit carried over to the next two year period depending on recharge water supply).
  - b. *Option B:*
    - Initial payment
      - i. Each February the Board will estimate potential recharge water availability considering snow pack, reservoir carryover, canal capacity and CAMP recharge targets.
      - ii. Seventy-five percent (75%) of the estimated potential recharge payment will be provided to the participating canals in March.
    - Final Payment
      - iii. At the end of the recharge season the remaining balance due based on actual recharge amount will be paid to the participating canals.
      - iv. If no recharge occurs due to water supply or other reasons beyond participating canal control the Initial Payment will carry forward and will be the following year Initial Payment.
5. Participating canals will be required to coordinate with Water District 01 and Board staff to measure and monitor recharge and to document the actual amount recharged.
6. If recharge water is available and a participating canal company does not participate in recharge efforts, other than for reasons referenced or defined in the contract, the Board has the option of terminating the contract. A termination clause will be included in the contract that defines any penalties for breach of contract. The contracts will also include language (an “escape clause”) regarding the terms for when a canal company can be exempted from recharge, including maintenance, unexpected canal or system conditions and actions beyond their control, without losing status as a preferred provider of recharge, prior to March 1 annually.

\*\*\**Recharge activities are subject to the availability of ESPA Plan funds.*

**Attachment A**

**Estimated Managed Snake River Recharge Volume Allocations for Canals Assumed to Sign Preferred Wheeling Contracts**

**Above American Falls Reservoir – 60% of Snake River Recharge Water Supply**

Canal System (all canals above American Falls but Ft Hall Reservation canals)	Estimated Percent of Total Snake River Recharge Water Supply	Estimated Average Annual Recharge Water Allocation (Acre-Feet)
Fremont-Madison	14.7%	15,479
Great Feeder & other SF canals	23.6%	24,915
Butte-Market Lake	1.1%	1,456
Bear Trap	0.2%	249
Osgood	0.3%	349
Kennedy	0.1%	88
New Sweden (Great Western & Porter Canals)	3.4%	4,612
Idaho I.D.	3.8%	5,172
Woodville	3.8%	329
Snake Valley	1.7%	2,387
Blackfoot	1.3%	1,382
New Lavaside	0.4%	460
Aberdeen-Springfield	4.7%	4,936
Corbett	0.8%	1,088
Nielson-Hanson	0.1%	92
Riverside	0.4%	552
Danskin	0.7%	969
Trego	0.2%	245
Wearyrick	0.2%	183
Watson	0.3%	391
Parsons	0.1%	124

**Below American Falls Reservoir – 40% of Snake River Recharge Water Supply**

Canal System (canals projected to participate)	Estimated Percent of Total Snake River Recharge Water Supply	Estimated Average Annual Recharge Water Allocation (Acre-Feet)
Milner-Gooding	12.8%	19,750
Northside	26.9%	41,506
Southwest	0.2%	309

- 1) This allocation attempts to maintain a distribution of 60% of the Snake River recharge water supply above American Falls Reservoir and 40% below American Falls Reservoir, however, in some years the Water Board's recharge water permit is will not be in priority above American Falls. This is reflected in the estimated water allocation numbers.
- 2) The actual allocation may be different depending on the canals that actually enter the contracts.
- 3) This is based on trying to maintain average annual recharge of 125,000 acre-feet.
- 4) If a canal can not actually recharge its allocation in any given year, its allocation would be passed to the next closest participating canal.
- 5) All Henrys Fork canals are included in Fremont Madison allocation and the Fremont Madison Irrigation District is expected to contract with the Water Board on behalf of all Henrys Fork canals. All South Fork canals are included in the Great Feeder allocation and Great Feeder Canal Company, Ltd. is expected to contract with the Water Board on behalf of all South Fork canals.
- 6) The allocation is based on the average of head-gate capacities and annual average diversions of the canal systems.
  - o To determine allocation for canals above American Falls:

Canal	Column A Headgate capacity (cfs)	Column B Average annual diversion (in thousand acre-feet)	Column C (Column A + Column B)	Column D (Column C for each canal divided sum of Column C for all canals above AmF)	Column E  Snake River recharge allocation  (Column D x 60%)
Example Canal 1	1000	200	1200	$1200/4800=0.25$	$0.25 \times 60\%=15\%$
Example Canal 2	3000	600	3600	$3600/4800=0.75$	$0.75 \times 60\%=45\%$
			4,800 (Sum of Column C for above AmF)		

- To determine allocation for canals below American Falls:

Canal	Column A Headgate capacity (cfs)	Column B Average annual diversion (in thousand acre-feet)	Column C (Column A + Column B)	Column D (Column C for each canal divided sum of Column C for all canals below AmF)	Column E Snake River recharge allocation  (Column D x 40%)
Example Canal 3	1000	200	1200	$1200/4800=0.25$	$0.25 \times 60%=10\%$
Example Canal 4	3000	600	3600	$3600/4800=0.75$	$0.75 \times 60%=30\%$
			4,800 (Sum of Column C for below AmF)		

Note: For Southwest, it is based on the capacity of their new West Cassia Pipeline.