Environmental Technical Working Group
ESPA Managed Recharge Program

Meeting Summary

No. 2-19
November 6, 2019
1:00-3:30 p.m.
Idaho Water Center—Boise, ID

Attendance:
IWRB—Wesley Hipke, Kala Golden, Brian Patton, Cynthia Bridge Clark
Idaho Rivers United—Kevin Lewis, Stephen Pfeiffer
Trout Unlimited—Peter Anderson
Henry's Fork Foundation—Rob Van Kirk
Idaho Power Company—David Blew, Shaun Parkinson, Kresta Davis-Butts
A&B ID, Burley ID, Milner ID, Twin Falls CC—Travis Thompson
IDEQ—Kathryn Elliott, Amanda Laib, Graham Freeman, Sean Woodhead

North Side CC—Alan Hansten
City of Twin Falls—Jason Brown
BOR—Mike Hilliard, Brian Stevens

Agenda Items:

- MOA Discussion— Brian Patton; Review of group evolution, intended function, and the Idaho Water Resource Board's (IWRB/Board) expectations for this group.
    - Background: Formed as a resolution to protests against 2 IWRB Applications for Permit (01-7142, 01-10609), set to meet at least twice annually- prior to and following seasonal recharge operations, intended to optimize outcomes of the ESPA CAMP as they relate to managed recharge. Several benefits of recharge activities, though acknowledged that there is the potential for impact. Specific to managed aquifer recharge.
    - Expectations: Group will meet to identify and discuss environmental concerns that are a result of the Board's managed recharge program activities, come to a consensus on issues that require attention, and provide recommendation(s) to the Board that: clearly identifies the concern, how the group recommends it be addressed, and what the intended outcome will be.
    - ERTW group provides unique opportunity for stakeholders to make a difference if able to reach consensus on critical issues, by providing valuable input on potential environmental impacts from managed recharge that can help guide solutions.
    - IWRB sincere about listening to concerns and making reasonable effort to find solutions.
- IWRB Recharge program update—Wesley Hipke; Current operations, limiting factors, current and projected recharge projects.
    - Current operations: Recharge season began October 24, 2019; total natural flow water recharged 5,467 af; current diversion rate ~320 cfs, median ~244cfs; North Side CC

(220cfs), Twin Falls CC (50cfs), SWID (56cfs); Total NF available below Minidoka Dam = 500-550cfs (typical minimum flows through this reach). Potential for winter capacity in the Lower Valley = 1,000-1,400 CFS

- Limiting factors: water availability (available flows and rights in priority), weather-freezing conditions (ice damming) and warming conditions (soil erosion, damages to conveyance canals); canal operations/infrastructure issues (planned maintenance), other. Current projections anticipate about 30% downtime for season, likely to go up.
- Recharge Projects:
  - Recently Completed:

Partner	Project	Capacity (cfs)
NSCC	Wilson Canyon	~ 200-350
GFCC	Ward Recharge Site	~ 12

  - Active Construction:

Partner	Project	Capacity (cfs)	Estimated Completion
AFRD2	Dietrich Hydro by-pass	NA	Spring 2020
AFRD2	MP29 Recharge Site	~300	March 2020; flows beginning Dec 14, 2019
AFRD2	MP 28 Hydro by-pass	NA	Winter 2019
A&B ID	Injection Well	~20-30	Spring 2021
TFCC	Injection Well	~30-40	Fall 2020
FMID	Egin Phase II	~100-150	Spring 2020

- Potential Impacts on the Mid-Snake (below Milner)—Group discussion;
  - What do ramping rates look like in recharge canals and effect on flows out of Milner (topic for next meeting);
  - What happens to flows once recharged? Availability of modeling, need to understand not just volumes being recharged but when (timing) on when flows return to the river via springs and reach gains.
    - Recharge in vs flows out of aquifer not a 1:1 return; need to better understand where flows go.
  - Concerns about taking Milner to zero, particularly during the winter time. Jan-Feb 2019 was first occurrence; IWRB using flows between Minidoka and Milner for recharge activities. Need to better understand what impact this has on water quality and fisheries.
    - City of Twin Falls has limitations on wastewater permit that are dependent upon certain flows in the river. Currently under relicensing with IDEQ. Lower flows mean higher limits; already struggling or not able to meet difficult limitations; city does see return flows between Milner and TF gage
    - Other possible impacts/concerns: sediment buildup, Phosphorus levels, macrophyte build up; need for potential monitoring to determine impact
    - Steady flows past Milner for spring Sturgeon Spawning
    - Concerns of possible effects on endangered snails (flow regimes and GW temperatures), no current data suggesting impact, but something to consider

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- Quantifying freshet targets—Rob VanKirK; Determining flow targets in various reaches where recharge occurs.
    - Difficult to determine specific flow targets for various reaches, attempting to find reasonable targets. Possible methods for determining :
        - Reconstruct natural hydrograph; not very reasonable to do since system is no longer natural
        - Look at regulated hydrology we've had, what effect has recharge has; specific to reaches
        - Look at each reach's geomorphology
    - Due to extended timing of meeting, will discuss more on this topic as spring meeting. Rob will draft scope for methods
- Other topics—Brian Patton; review of presentation to IWRB Joint Committee from October 23,2019, discussion of original Implementation Committee, various groups and committees now in existence, and how each contributes to the ESPA CAMP and monitoring of progress.
    - Several entities requesting to restart the Implementation Committee; also several advocating not to, concerns over "committee overload," is it necessary to have another given all other committees currently in place?
    - ESPA CAMP goals being carried out, just not in the way originally proposed.
    - Other strategies already have groups/forums in place that monitor and discuss activities. This group discusses environmental concerns for recharge specifically, maybe a need for larger group discussion on recharge, but may not make sense to reformulate the entire Implementation committee for a variety of reasons.
- Next Meeting: **April1, 2020** (first Wednesday in April, as with previous). Topics:
    - Presentation from IDWR Hydrology staff on reach gains and spring flows (Mike McVey and Matt Anders)
    - Ramping conditions in canals where recharge occurs
    - Scope for Quantifying Freshet Targets (Rob will draft, will be sent out before spring meeting)

ACTION ITEMS:

- By December 1, 2019: IPC and City of Twin Falls will draft a memorandum to IWRB and submit to Board staff. Memorandum will address:
    - Proposal for bypass flows at Milner during winter 2019/2020 recharge operations
    - Purpose of bypass flows
    - Intended outcome of allowing bypass flows
- Spring 2020: Rob VanKirk will draft proposed scope of work for methods on quantifying freshet targets. Will submit to Board staff for dispersal to group prior to Spring meeting

Reference Materials Attached:

ERTWG MOA

Recharge Program Update (Presentation)

CAMP Implementation Committee (Presentation)

Environmental Technical Working Group
ESPA Managed Recharge Program