LEMHI BASIN SETTLEMENT WORKING GROUP MEETING REVISED AGENDA

September 24, 2020

1:30 PM to 5:00 PM

Idaho Department of Fish and Game Conference Room
99 Highway 93
Salmon, Idaho

1:30 – 1:45 PM	Introduction	Clive Strong Norm Semanko
1:45 – 2:30 PM	Discussion of Sprinkler Conversion	Carter Borden
2:30 – 3:30 PM	Settlement Goals and Objectives	Group
3:30 – 3:45 PM	Upper Lemhi Flushing Flow Discussion	Tom Curet
3:45 – 4:00 PM	Place of Use Flexibility Tools	Mat Weaver
4:00 – 4:30 PM	Wild & Scenic Rivers Subordination Accounting	Scott Storms
4:30 – 4:45 PM	Water Model Scenarios	Group
4:45 – 5:00 PM	Set Next Meeting Date and Agenda (Proposed date for next meeting is October 9th to accommodate scheduling conflict).	Group
5:00 PM	Adjourn	

LRBM Irrigation Conversion

Carter Borden, Ph.D.

Sept 24, 2020

Irrigation Conversion Questions

1. Flood irrigation: how much/timing of returns to the Lemhi River?

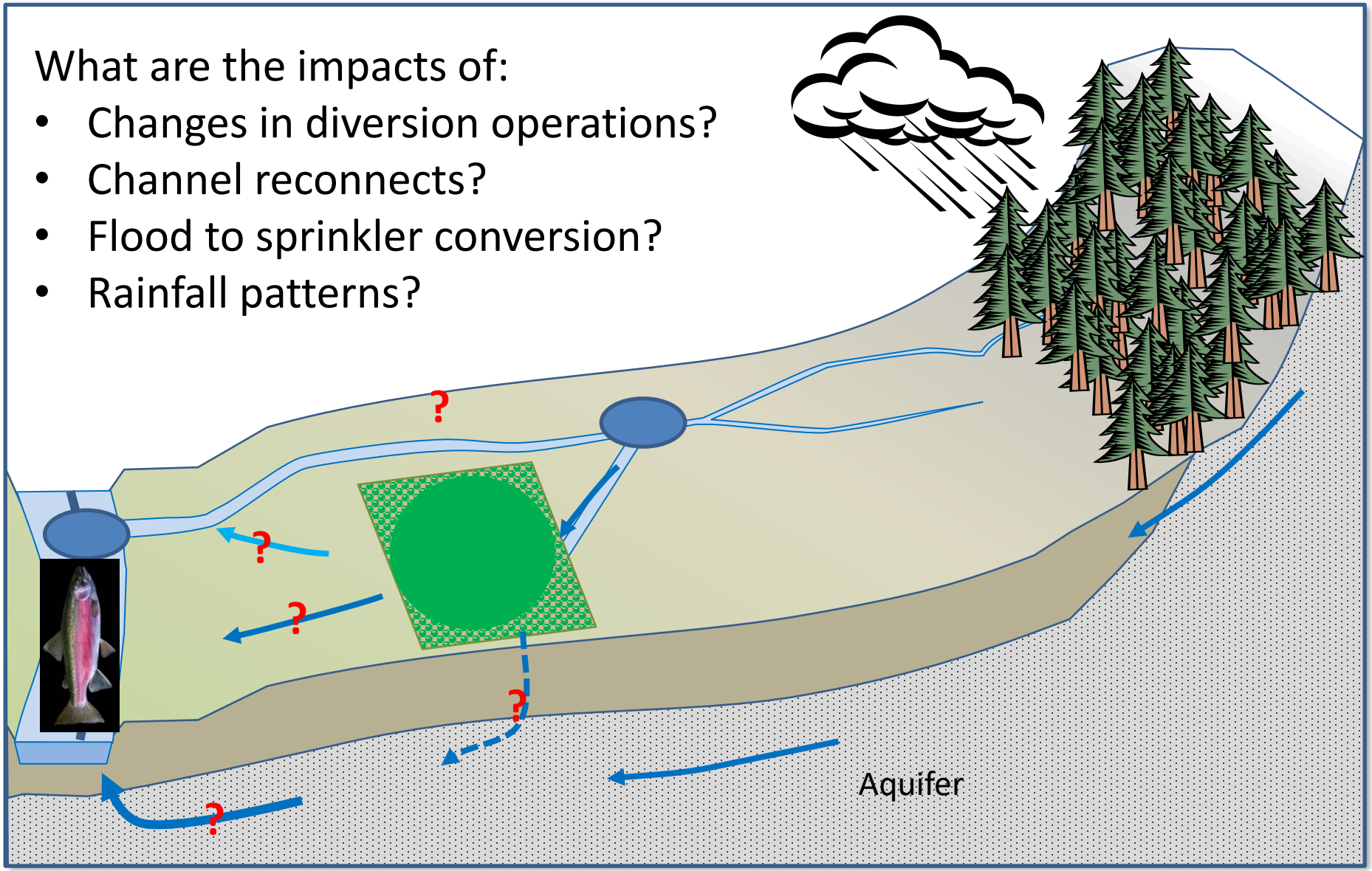
2. How does conversion from flood to sprinkler impact:
   a) Stream flows?
   b) Delivery reliability?

3. Where should conversion to sprinkler irrigation be encouraged, discouraged?

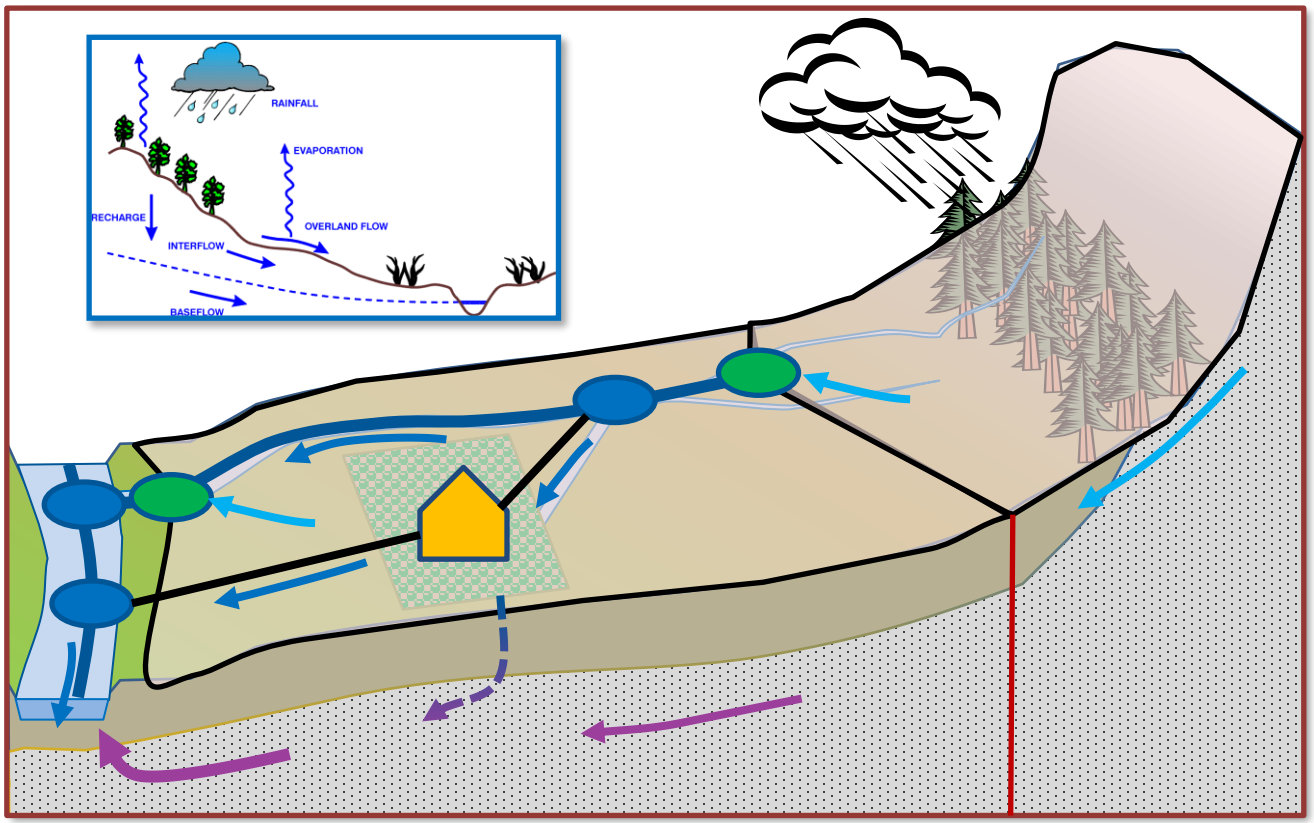
Overall Purpose

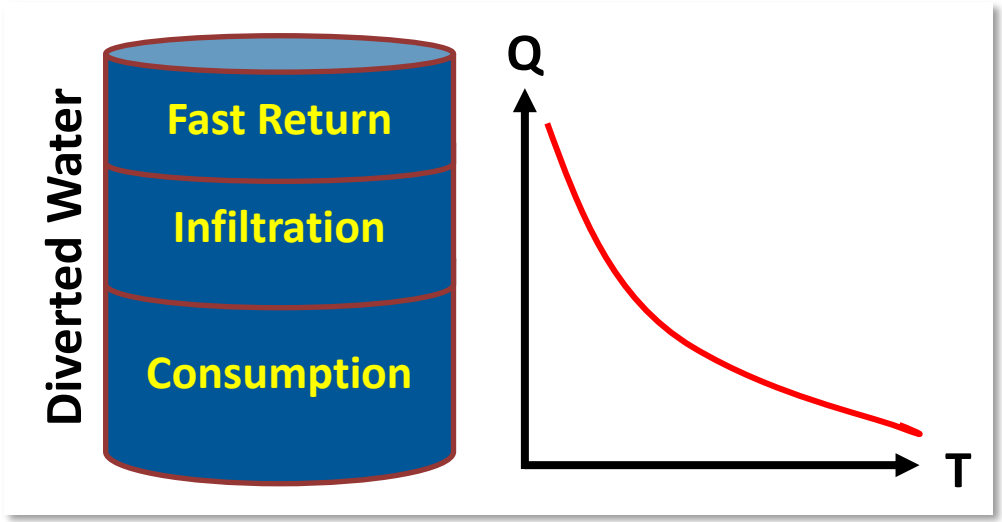
What are the impacts of:

- Changes in diversion operations?
- Channel reconnects?
- Flood to sprinkler conversion?
- Rainfall patterns?

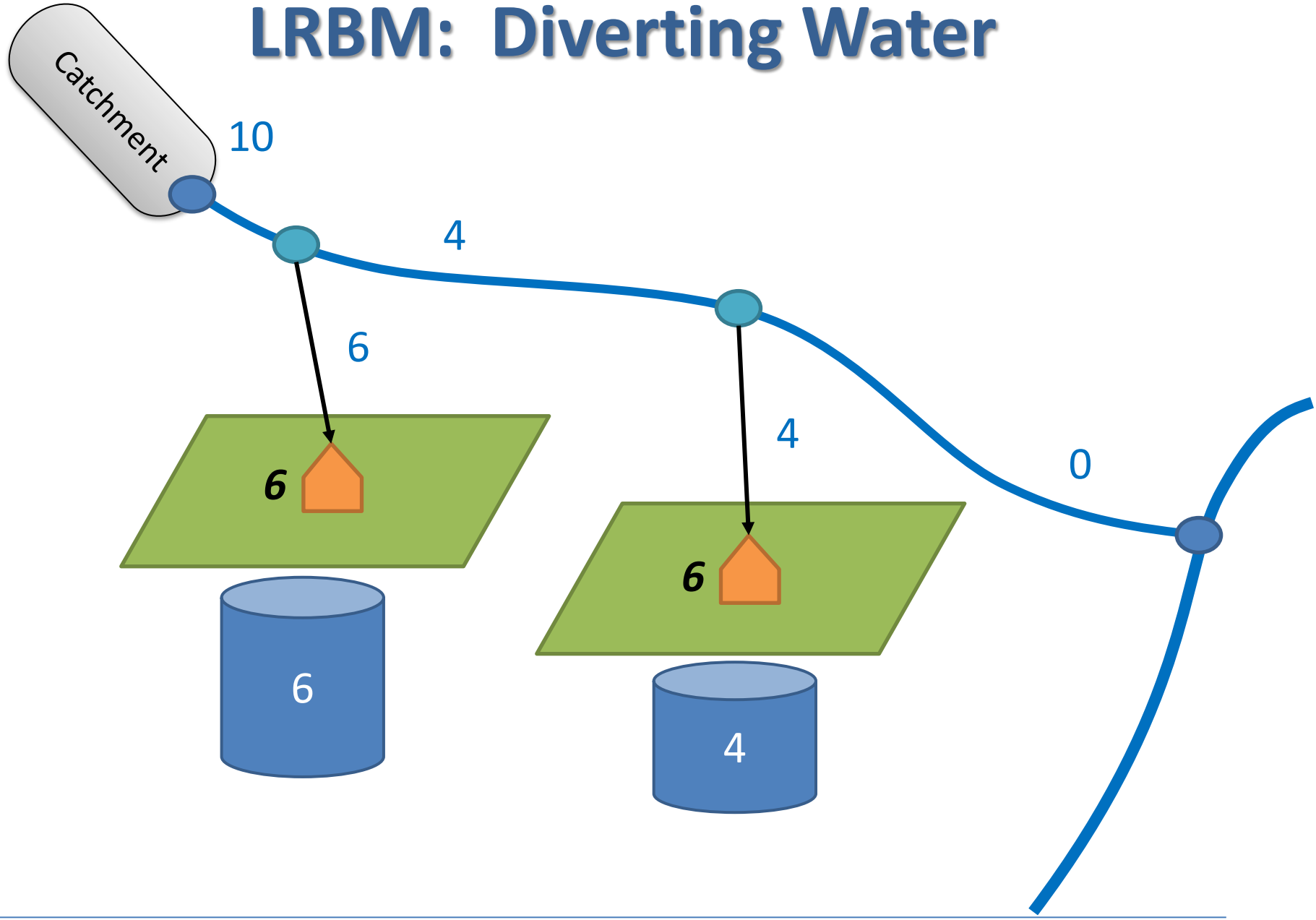


LRBM


RAINFALL
EVAPORATION
RECHARGE
OVERLAND FLOW
INTERFLOW
BASEFLOW

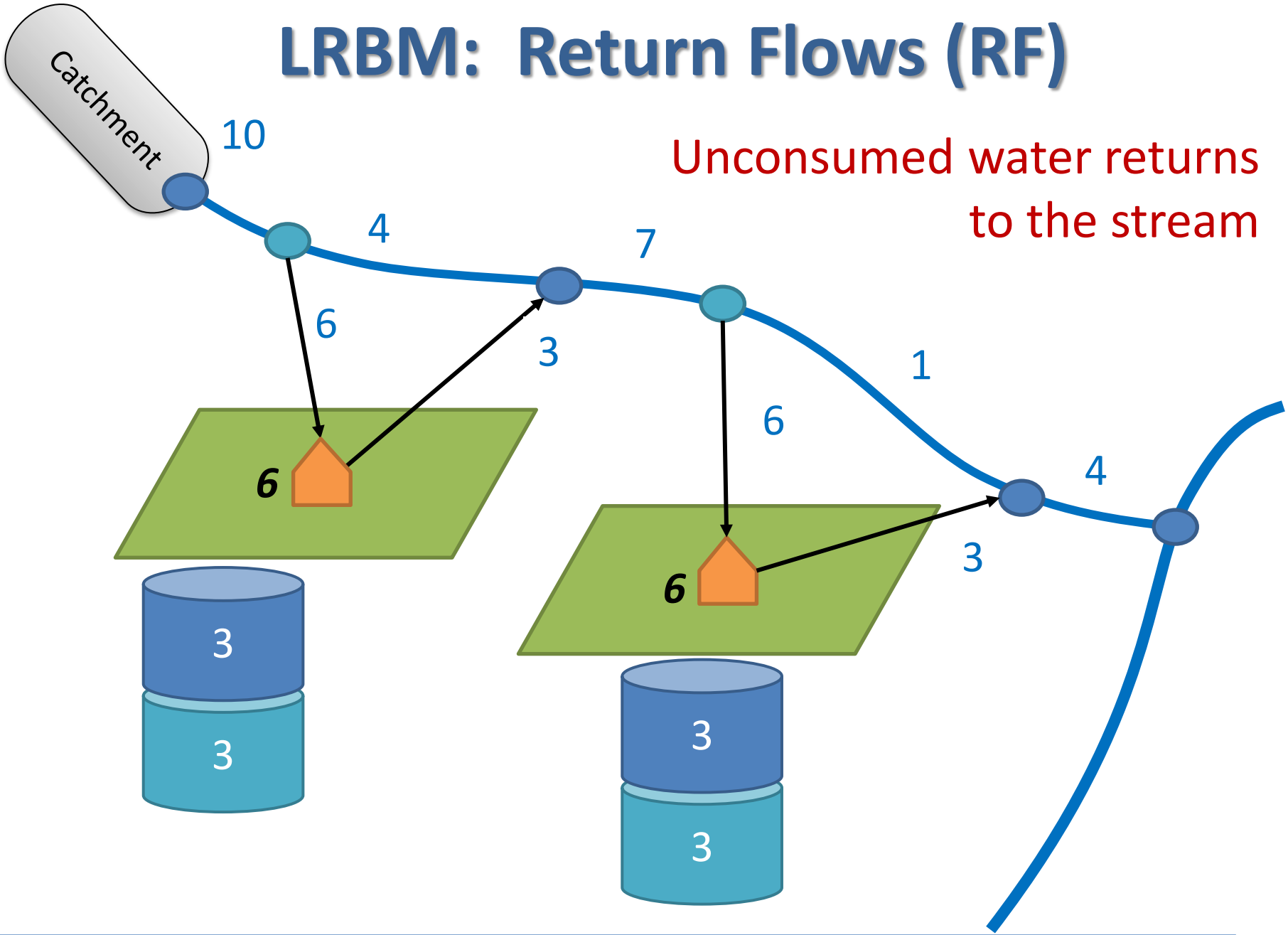

Diverted Water
Fast Return
Infiltration
Consumption
Q
T

LRBM: Diverting Water



Consumed

LRBM: Return Flows (RF)



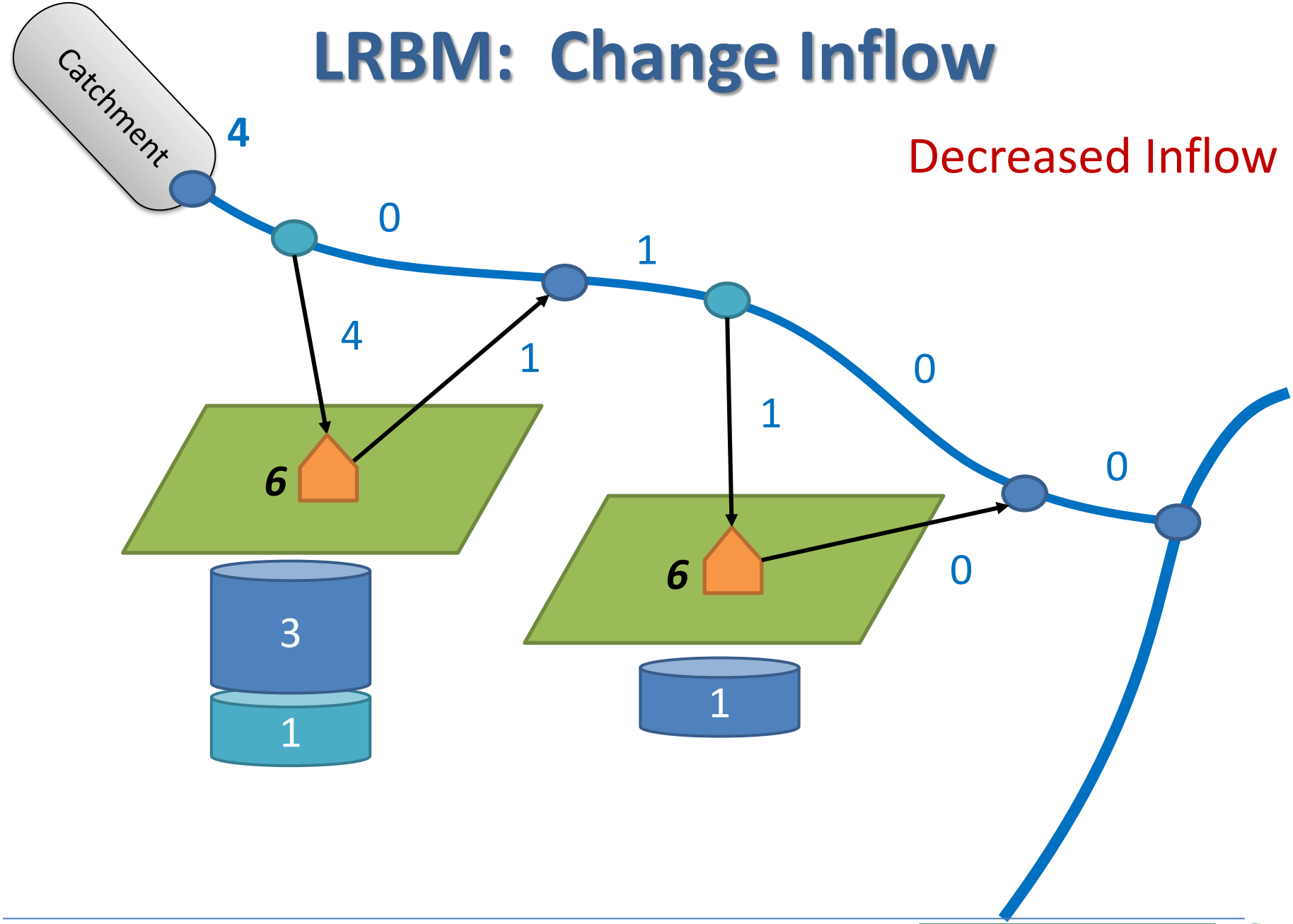
Unconsumed water returns to the stream

Consumed

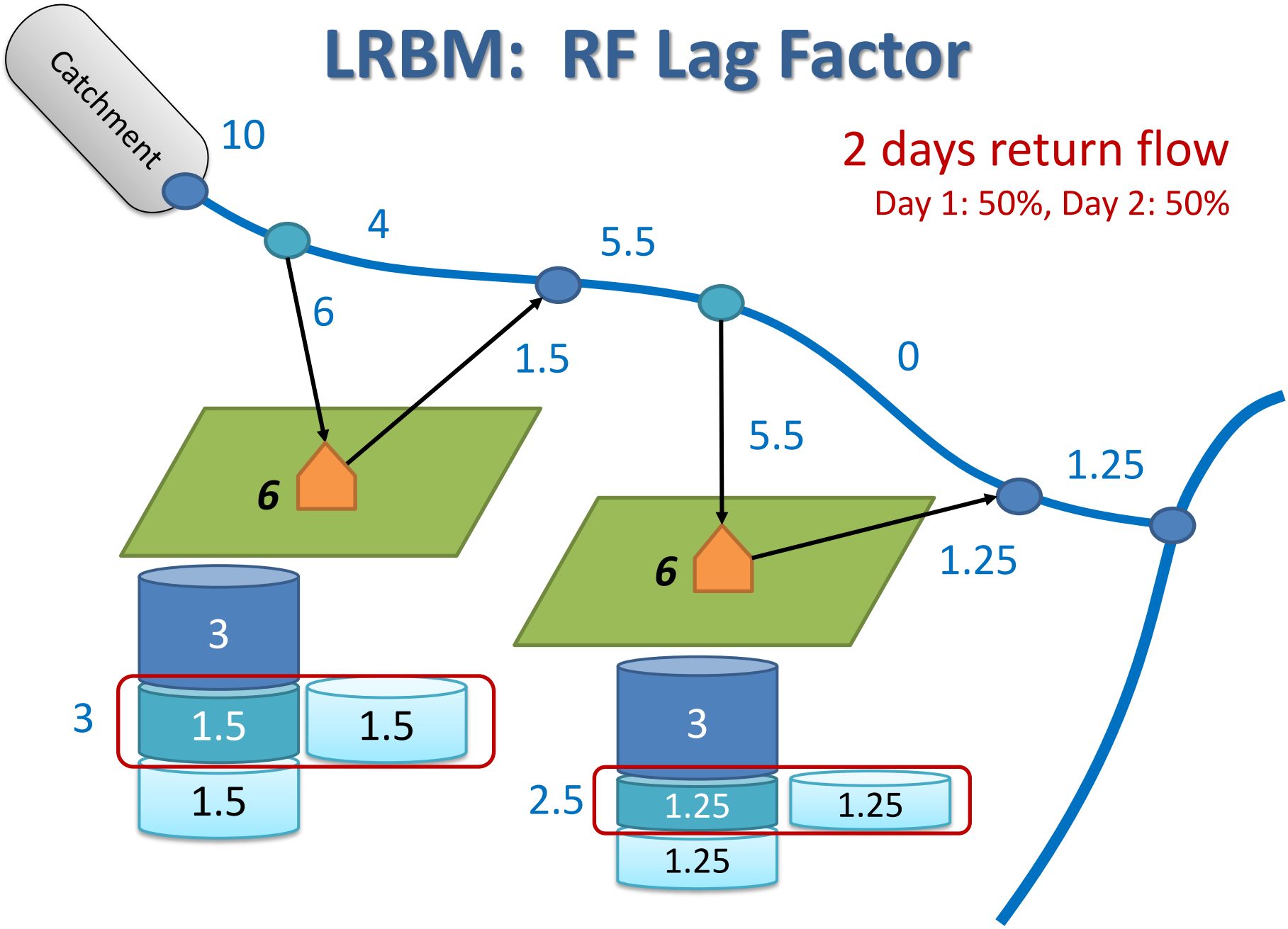
Return Flow

Consumption: 3

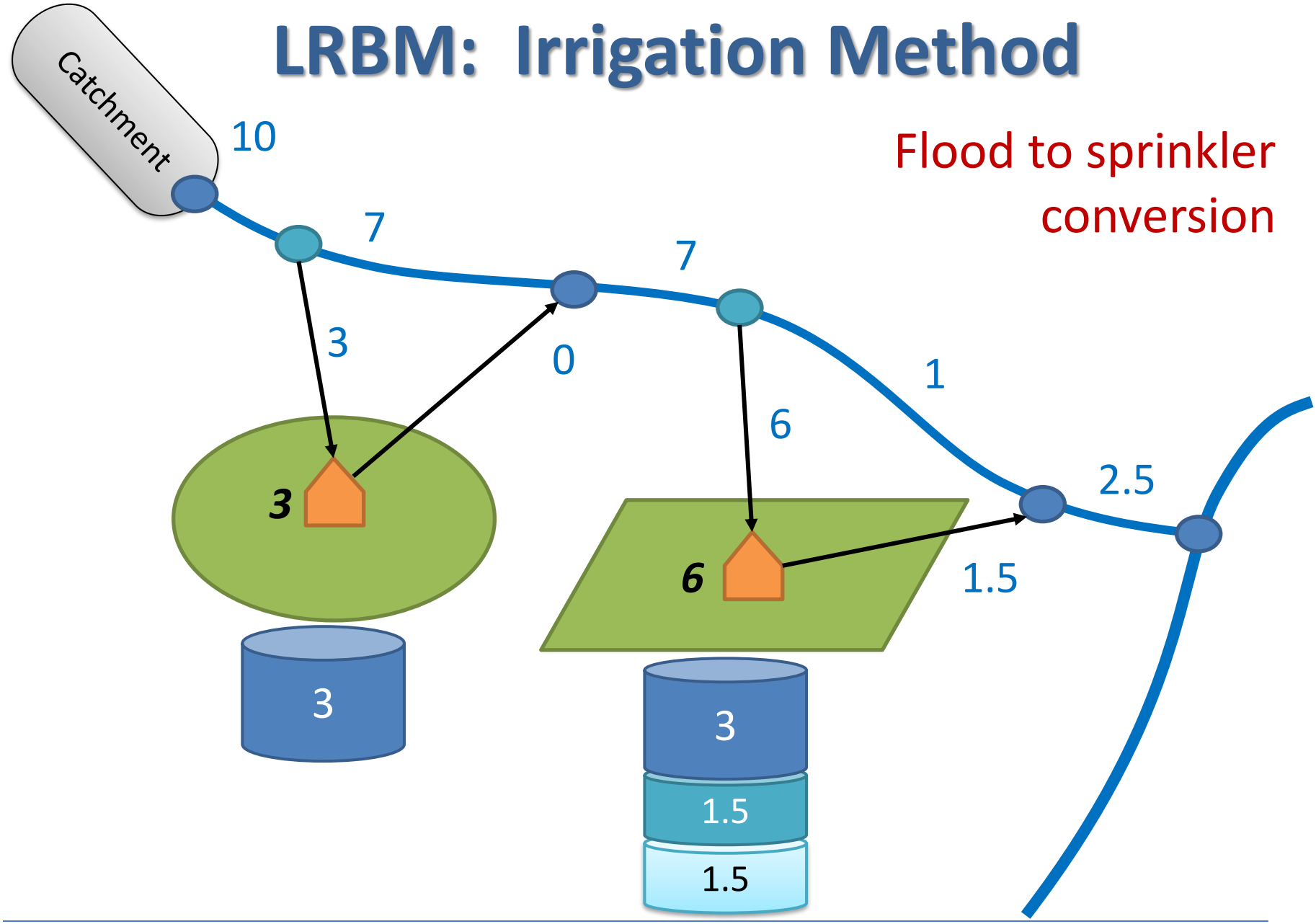
LRBM: Change Inflow



LRBM: RF Lag Factor



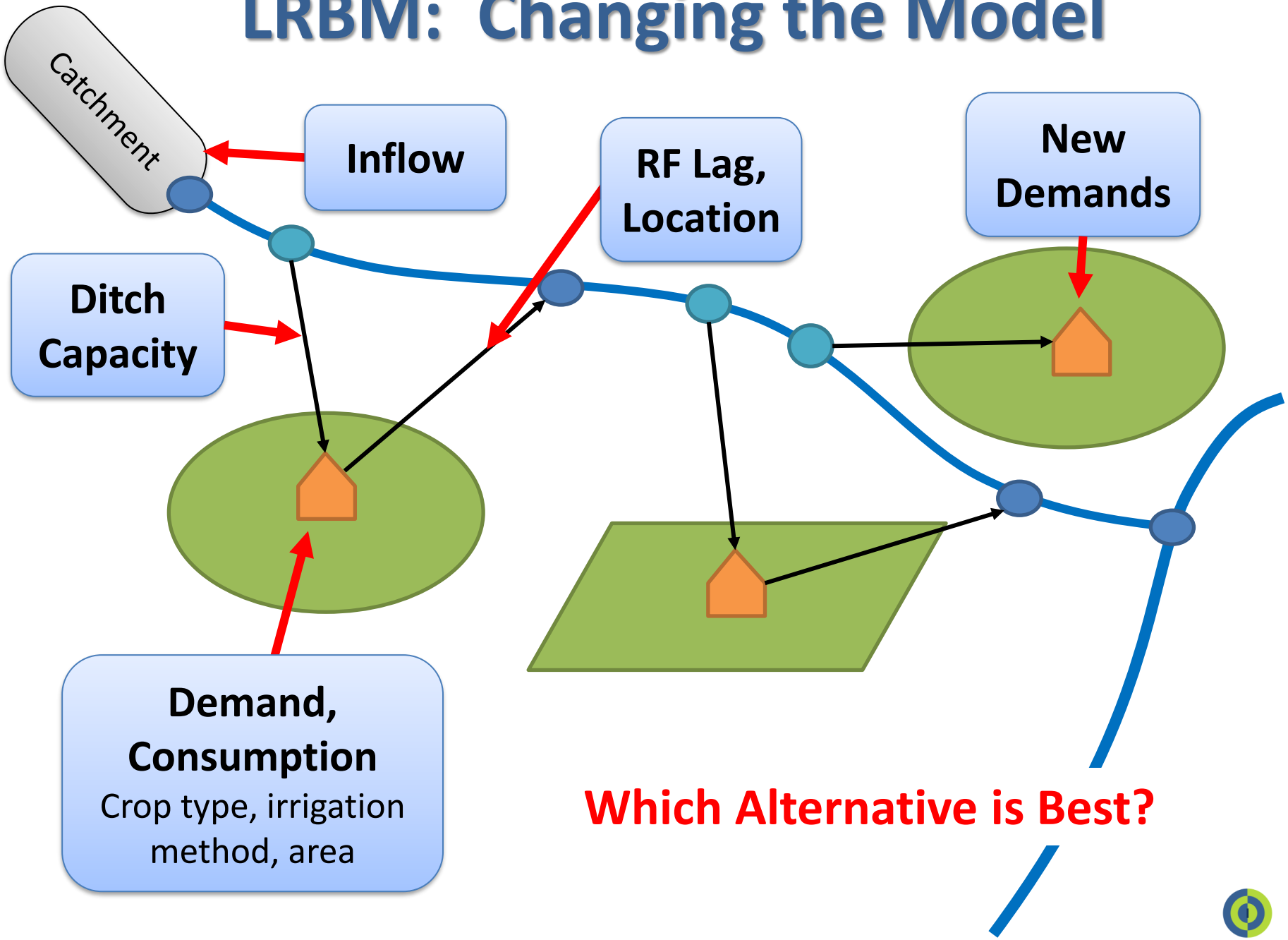
LRBM: Irrigation Method



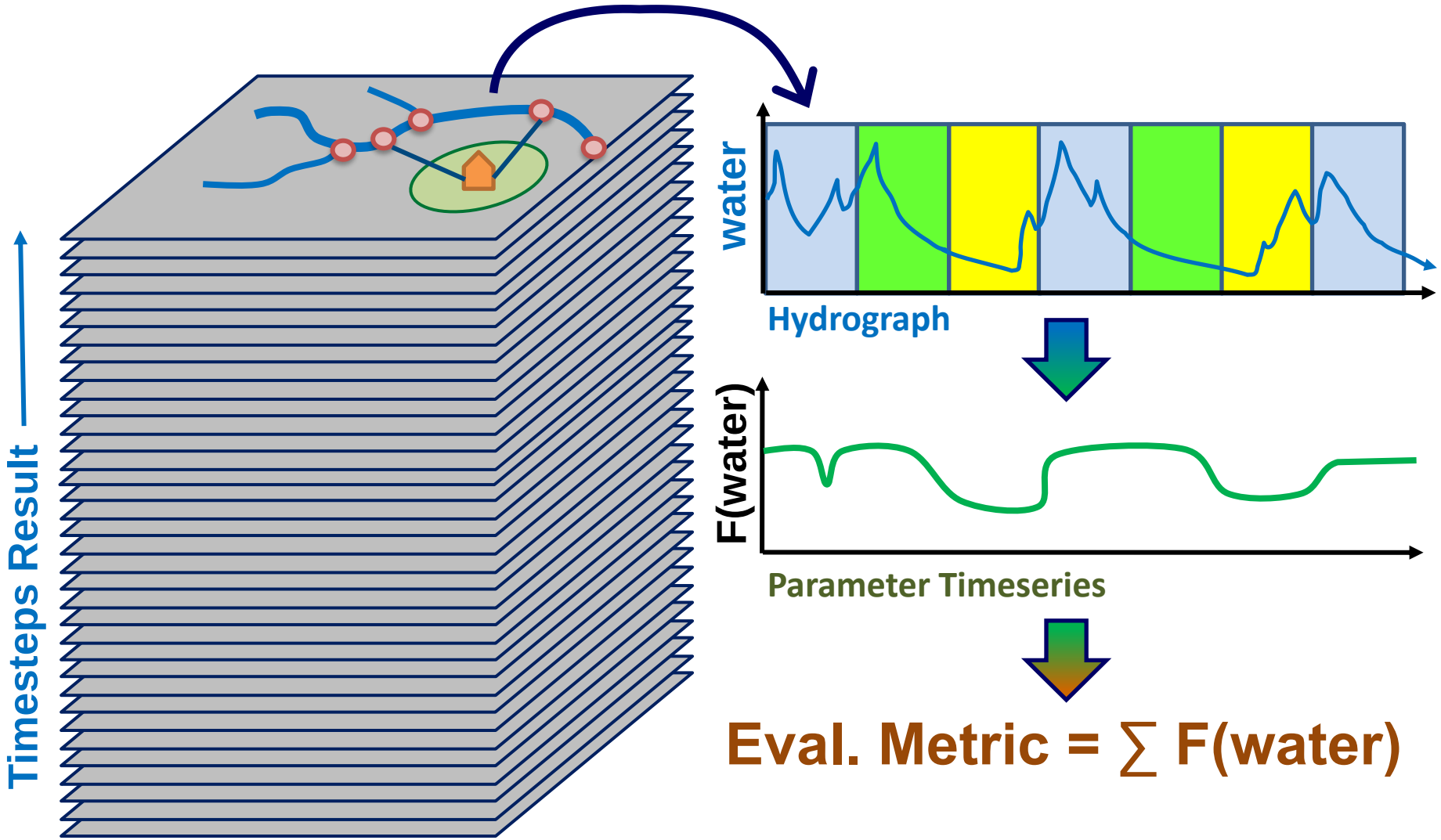
Consumed | Return Flow | Delayed RF

Consumption: 3

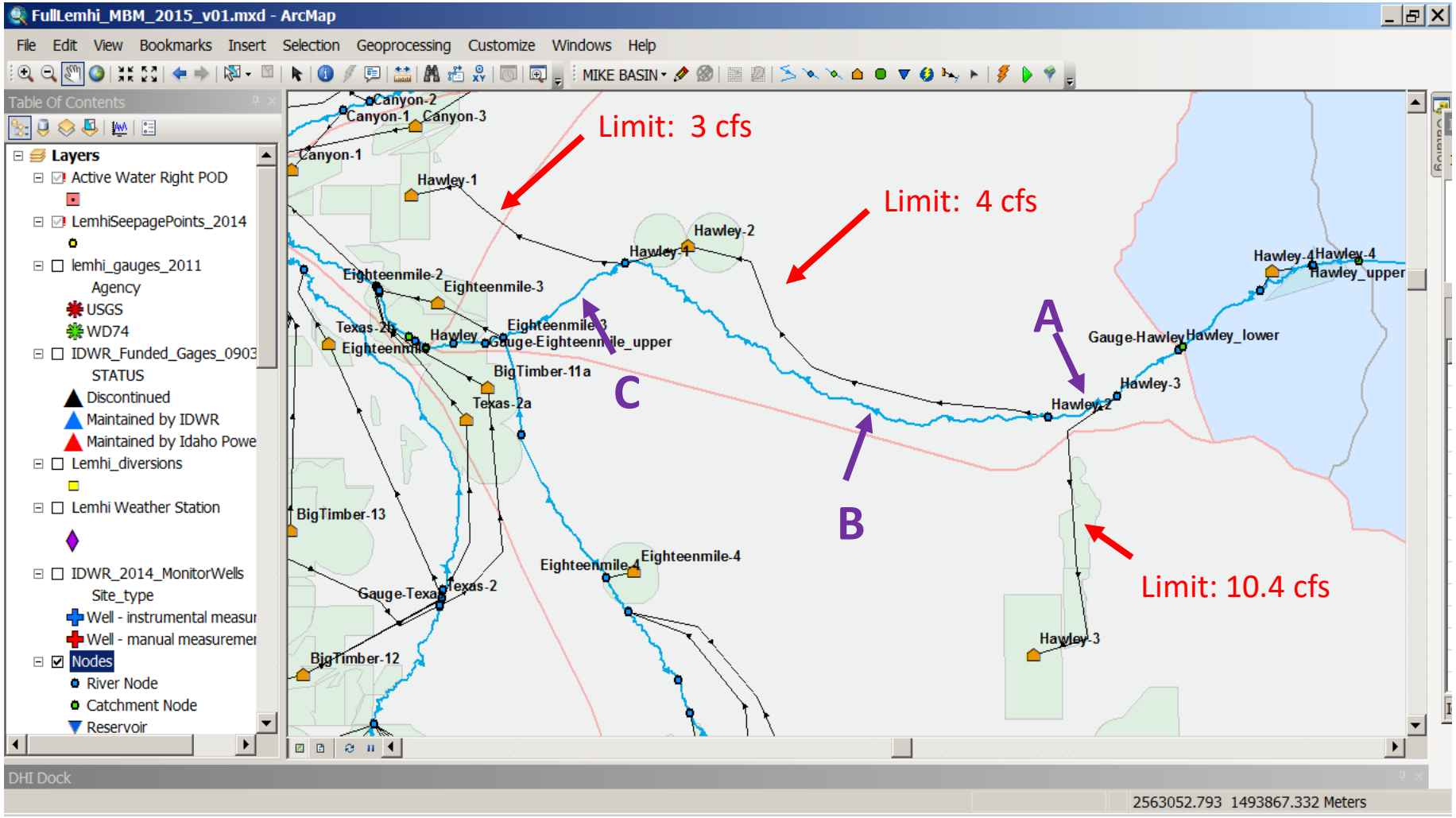
LRBM: Changing the Model



Post-Processing Analyses



Hawley Creek Scenario



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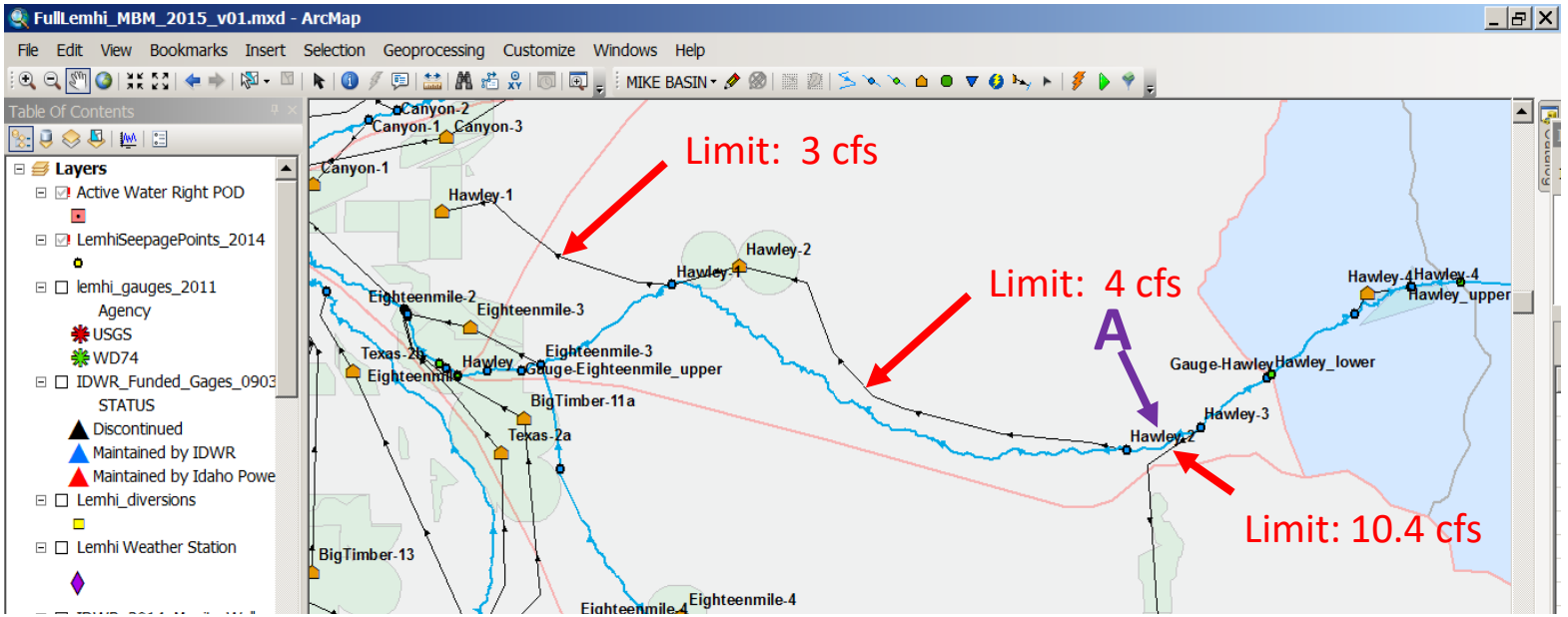

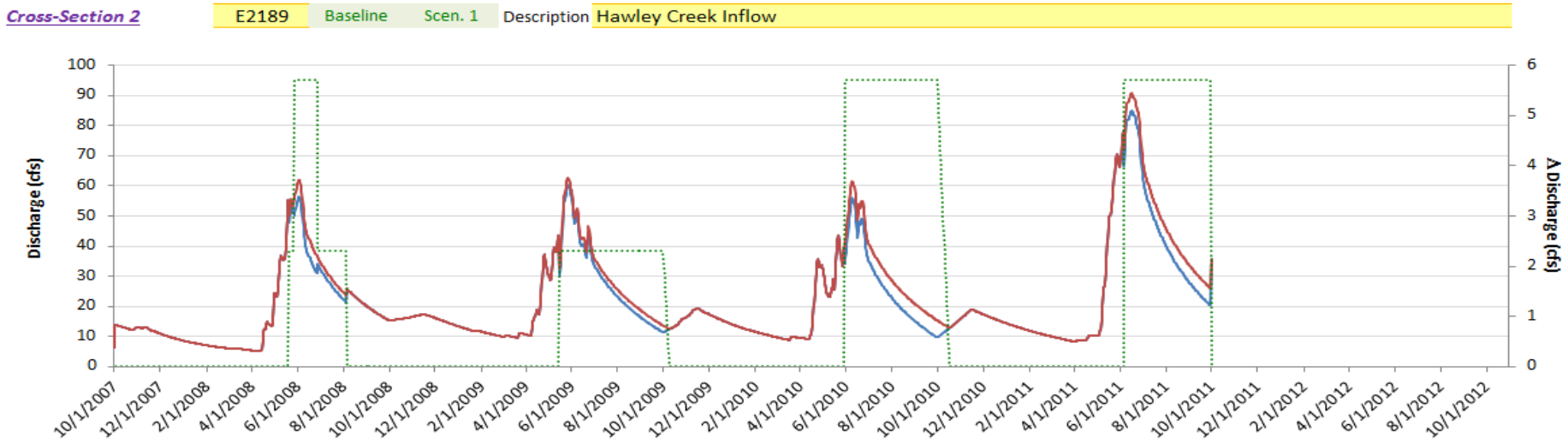

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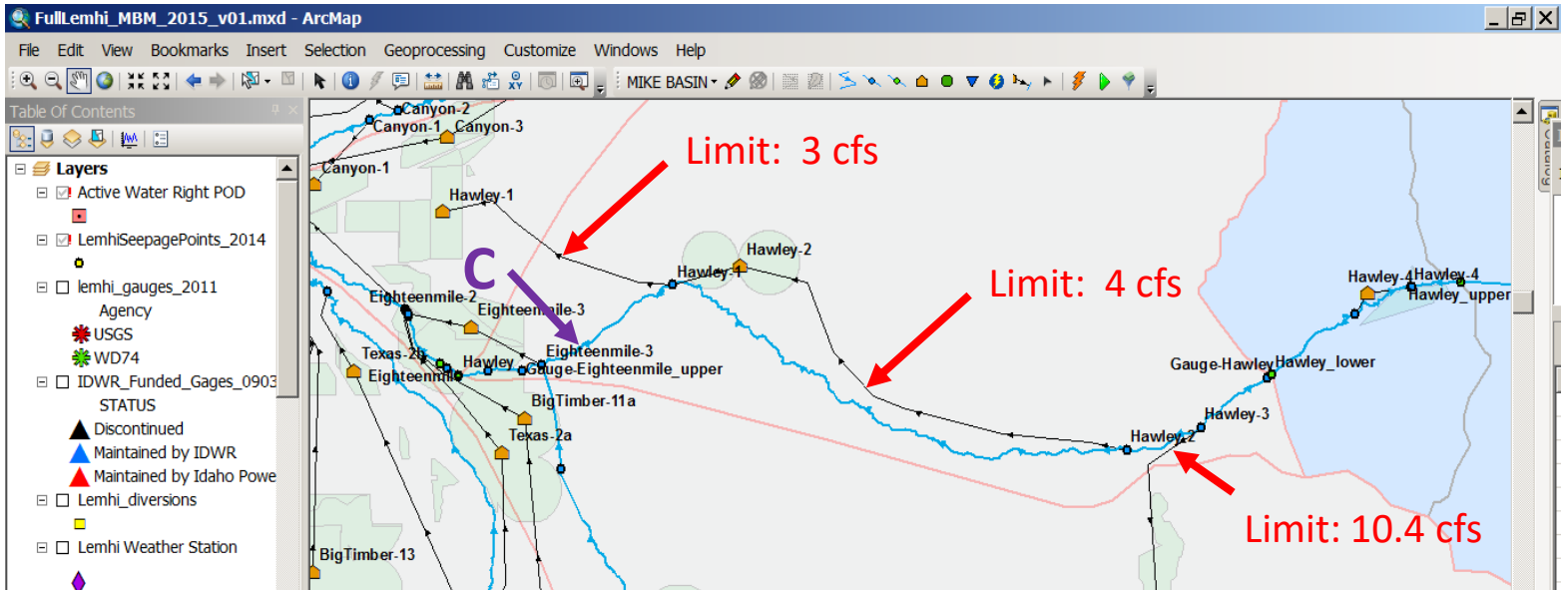
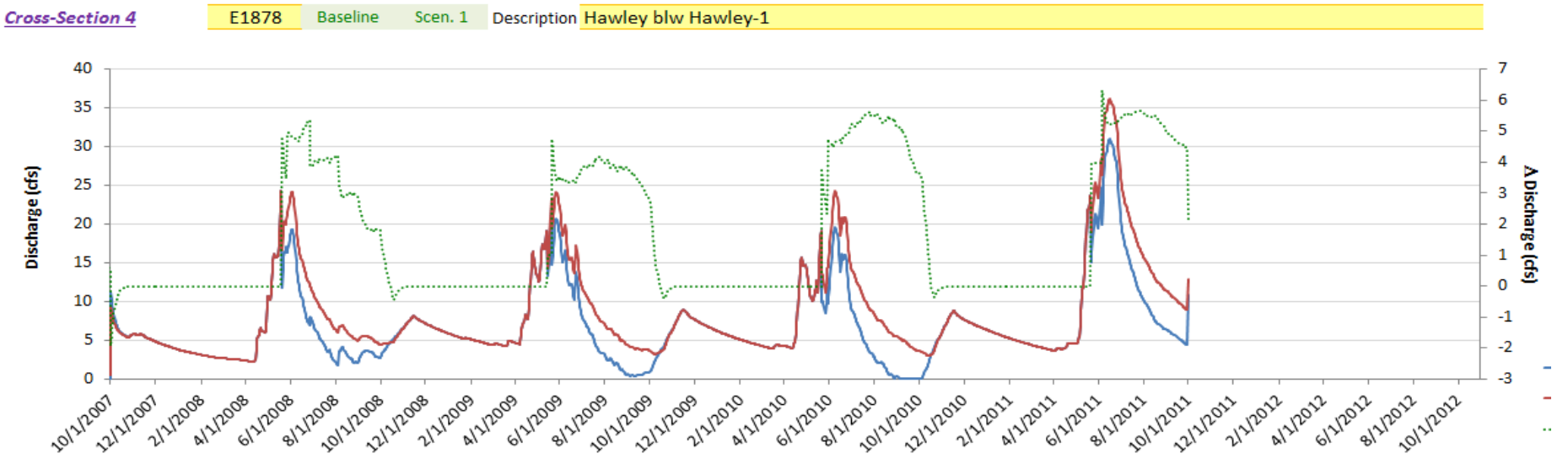
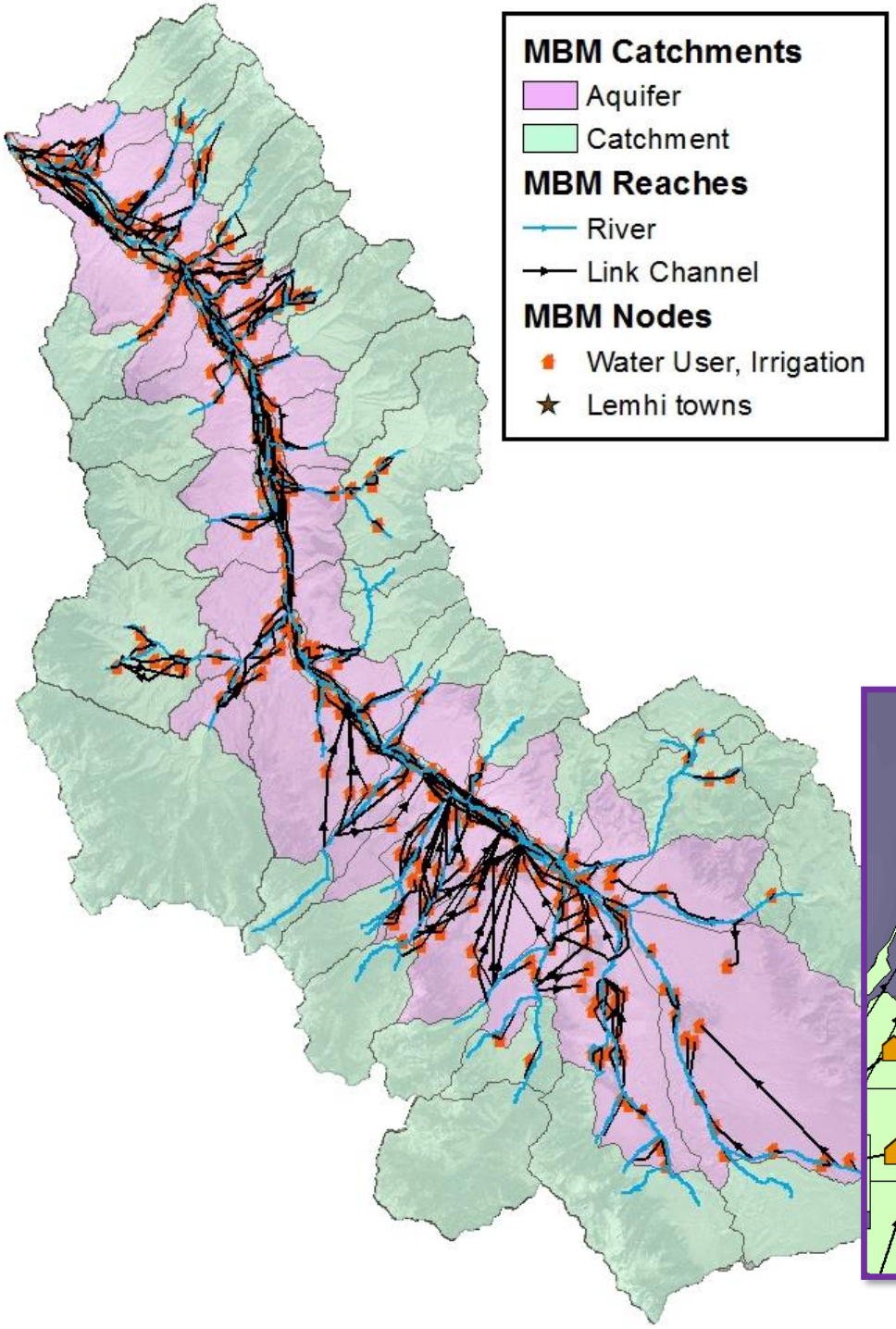
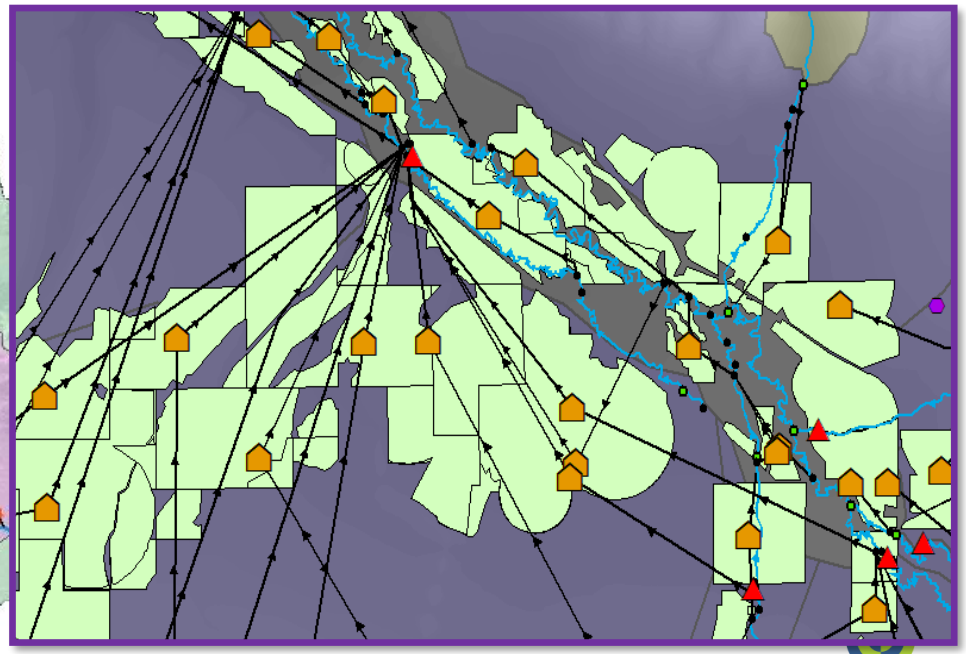






LRBM Stats

- 82 Catchments
  - NAM inflows
- 322 Water users
- Daily time step
- Calibrated WY 2008 - 2012
- Simulation period:
  Oct 1, 2007-Sep 30, 2017



Irrigation Methods

1. Flood irrigation: how much/when returns to the Lemhi River?

2. How does conversion from flood to sprinkler impact:
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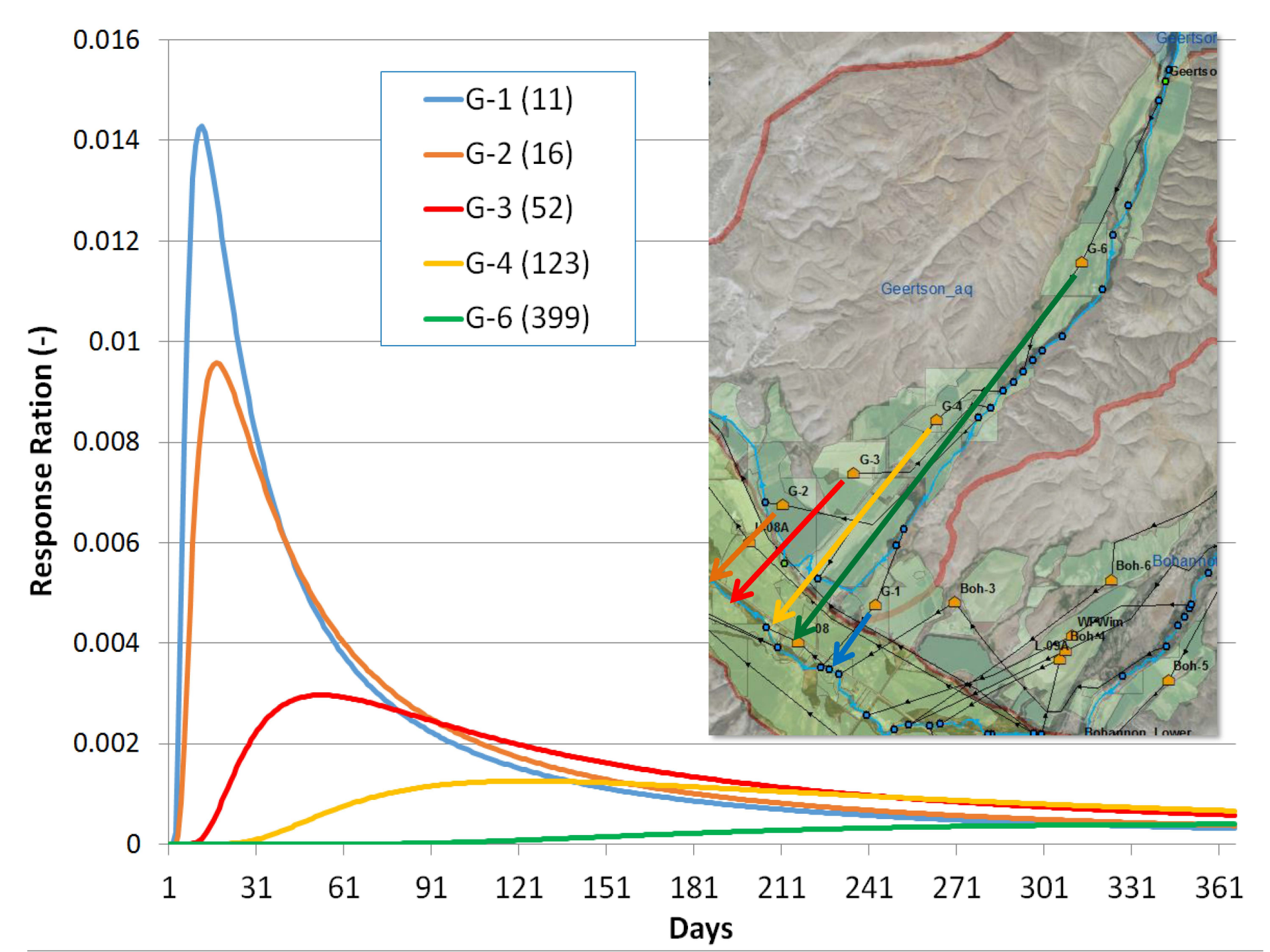
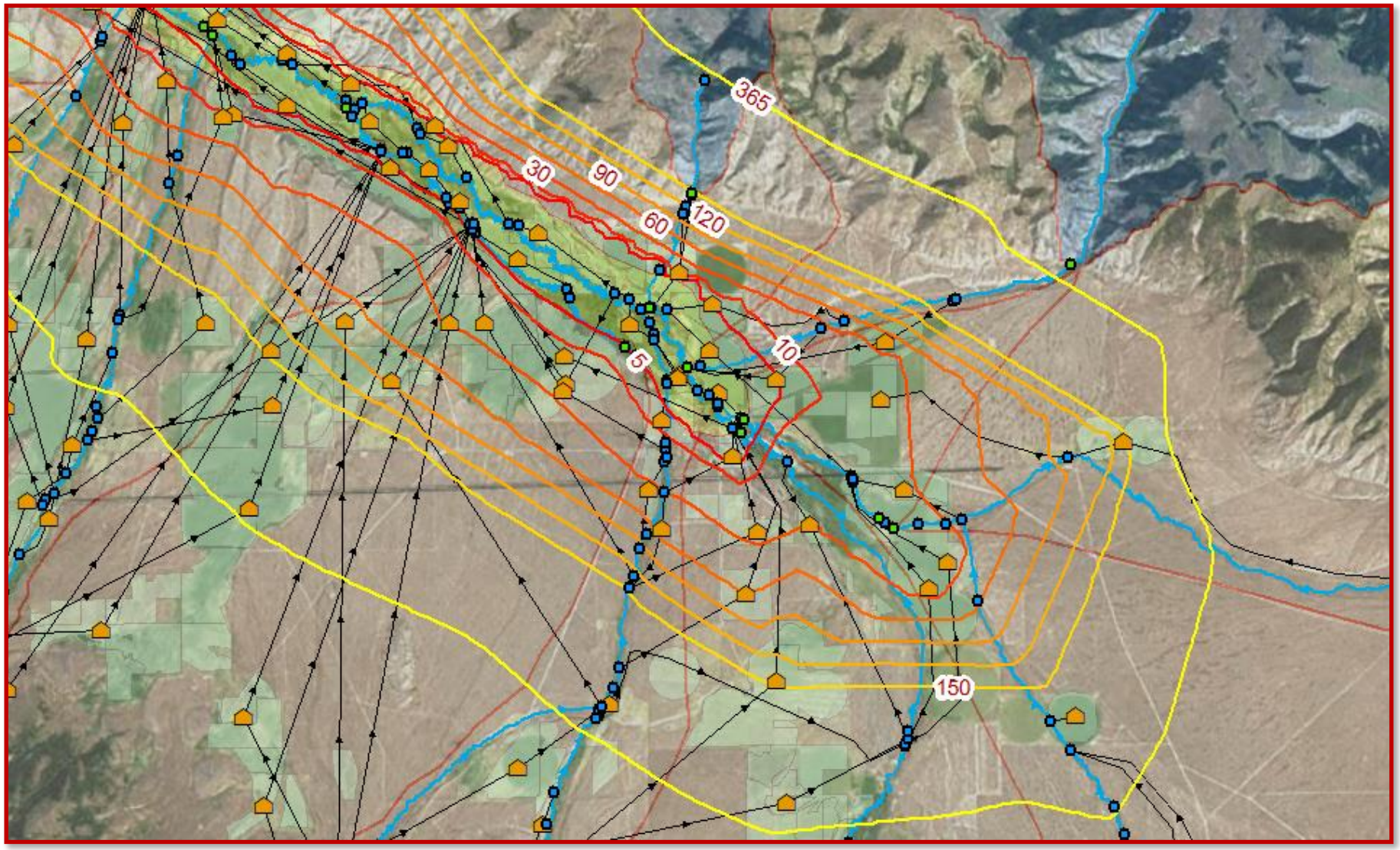
   b) Delivery reliability?

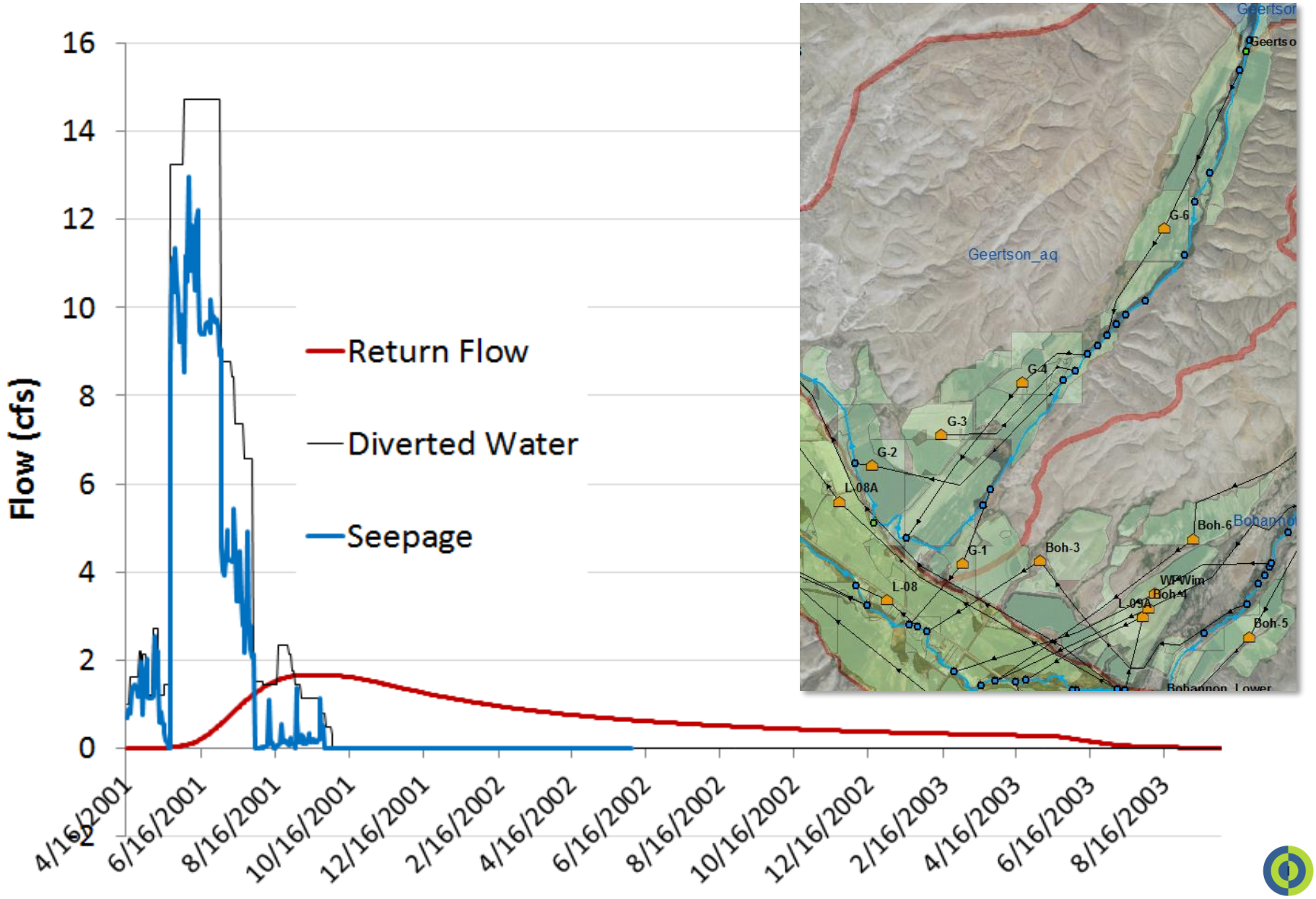
3. Where should conversion to sprinkler irrigation be encouraged, discouraged?


0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
Response Ration (-)
G-1 (11)
G-2 (16)
G-3 (52)
G-4 (123)
G-6 (399)
1
31
61
91
121
151
181
211
241
271
301
331
361
Days
Geertson_aq
G-6
G-4
G-3
G-2
G-1
Boh-6
Boh-3
Boh-4
Boh-5

GW Analytical Solution: Time to Peak



Groundwater Return



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LRBM: All Sprinkler Scenario

Conversion of all irrigation to sprinklers

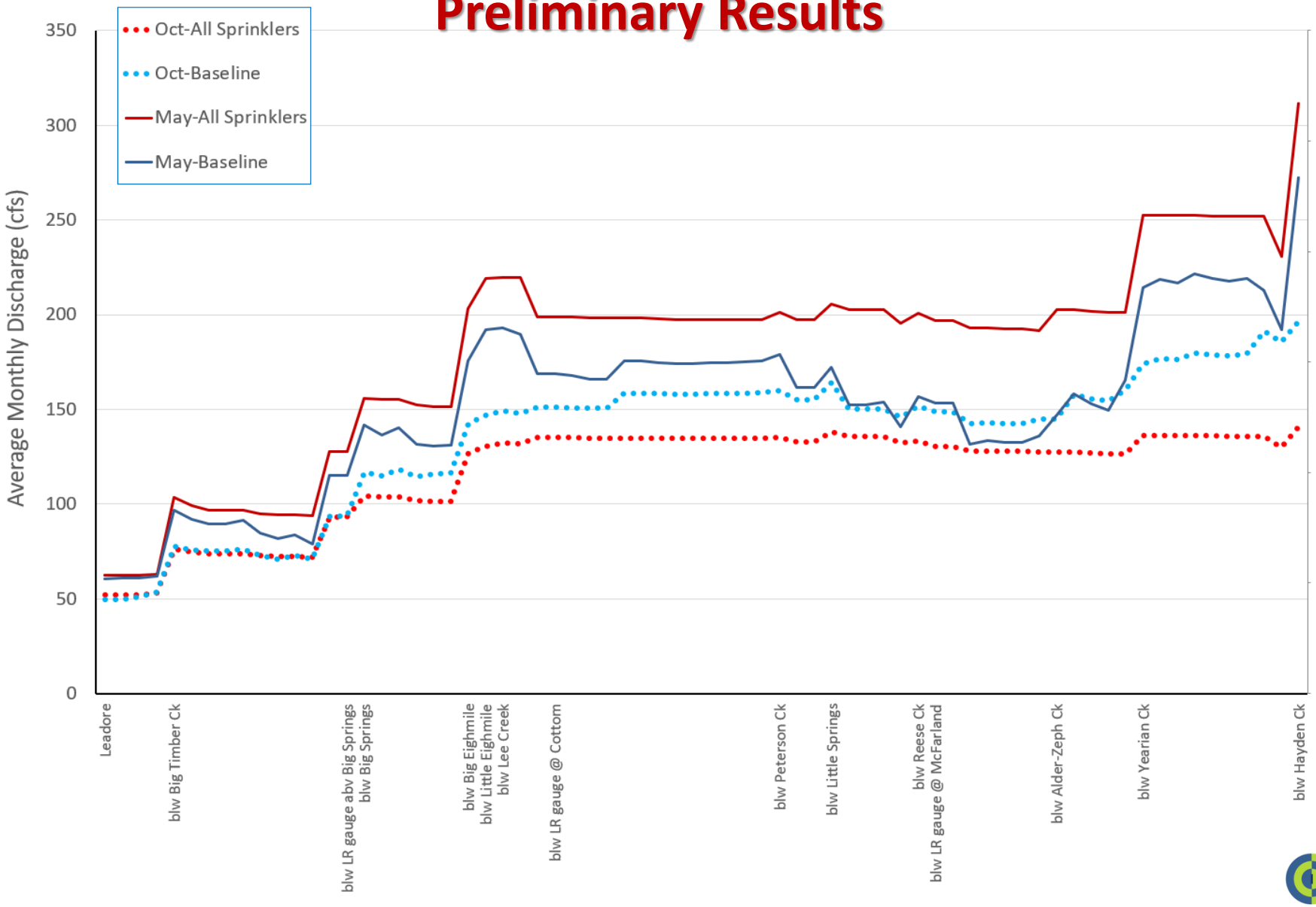
How will impact stream flow in the Lemhi River?

Assumptions for flood irrigation conversion:

1) Diversion rate 8 gpm/ac
2) Diversion schedule followed historic
3) Sprinkler irrigation is 100% consumptive

LRBM: All Sprinkler Scenario

Preliminary Results



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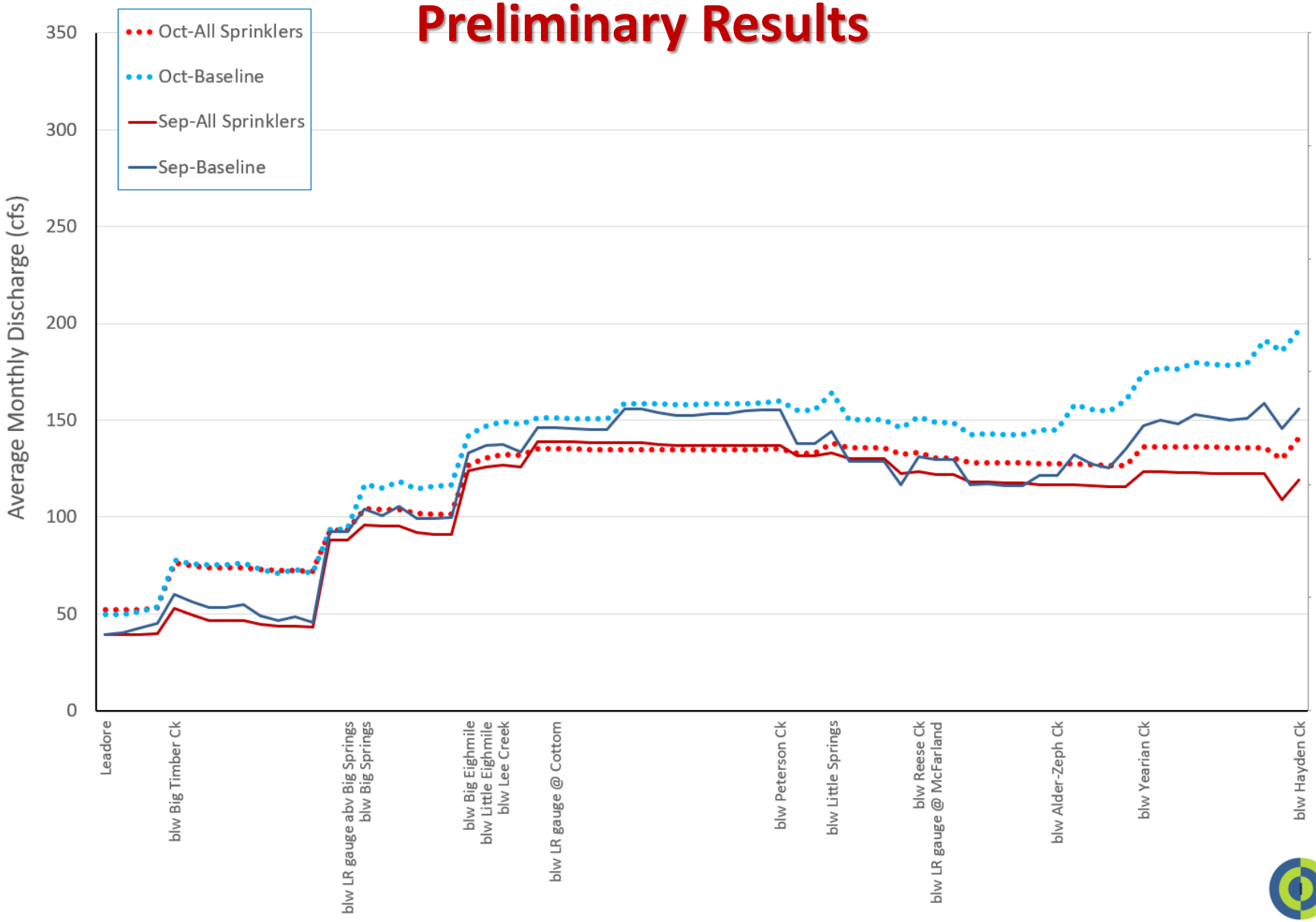
Preliminary Results



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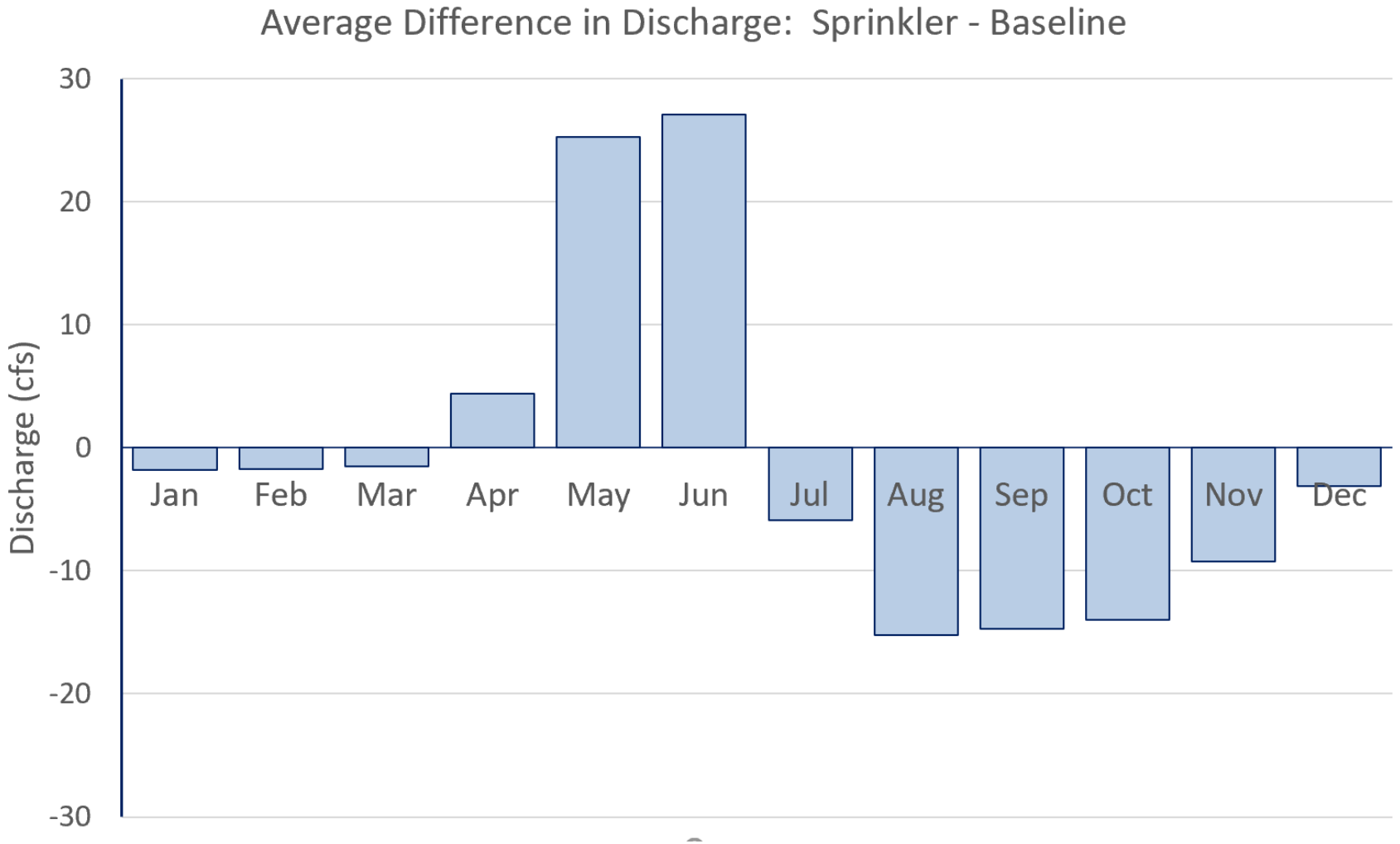
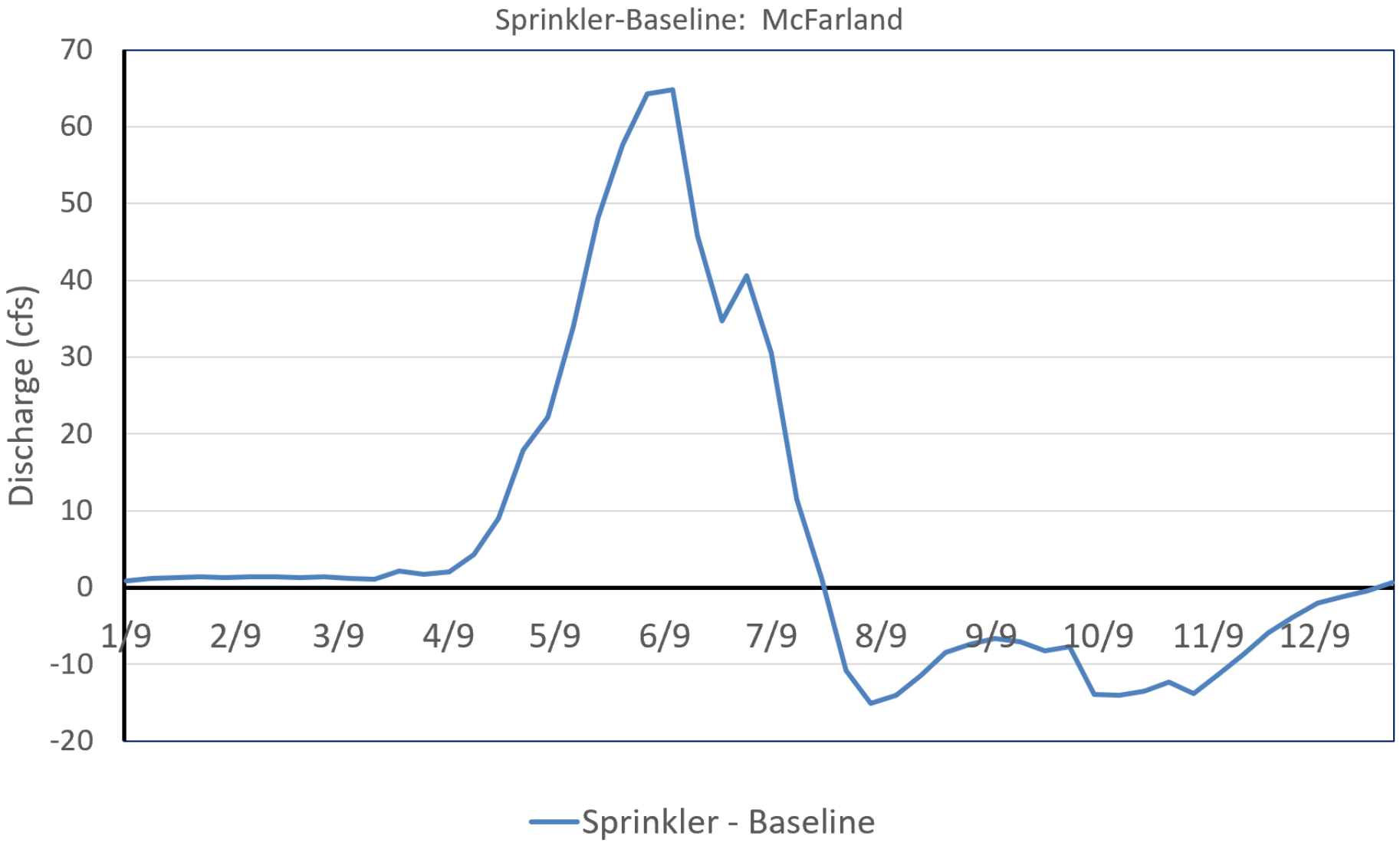
Preliminary Results



LRBM: All Sprinkler Scenario

Preliminary Results



LRBM: All Sprinkler Scenario

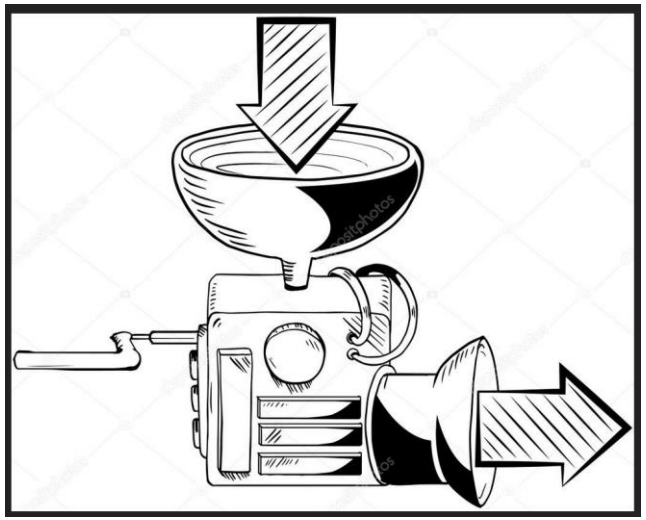
Preliminary Results

Preliminary = Depicts general system behavior

- *Magnitude of change, trends*
- *Improved input = improved results*

Stakeholder input

- Confirm “plumbing”
- Irrigation methods
- Irrigation operations



Irrigation Methods

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3. Where should conversion to sprinkler irrigation be encouraged, discouraged?

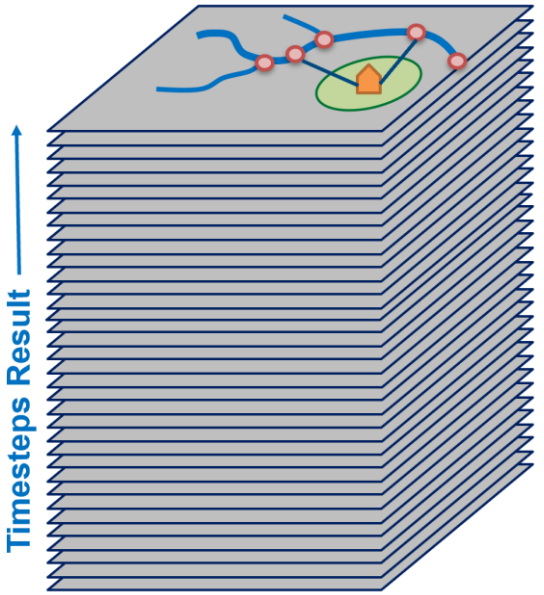
LRBM: Irrigation Conversion Overview

- Further from the Lemhi, less impact as return flow is spread out and longer to arrive
- Conversion Flood=> Sprinkler
  - ↑ early irrigation season Lemhi flows
  - ↓ late irrigation season Lemhi flows
- Trends continue downstream
- To do:
  - Quantify water availability/deficit in system
  - Quantify the return flow contribution from flood irrigation.

LRBM: Scenario Evaluation Criteria

How to Evaluate Scenarios?

1. Stream flow:
   a) Where: at a reach, along the stream
   b) Evaluation Frequency: monthly, annually, seasonally
   c) Characterize: volume, duration, timing, frequency, ramping rate



2. Diversion delivery/deficit (water user)
   a) Who: Specific users, trib, irrigation type
   b) Evaluation Frequency: monthly, annually, seasonally
   c) Characterize: reliability, water availability

Stakeholders/ decision makers decide

LRBM Uses

- **Common platform/data set** for understanding stream-irrigation network (plumbing), flows, water rights, irrigation types/consumption, ditch capacity
  - **Water is diverted at Point A (POU) where, when, how much does it pop up in the stream network (B).**
  - Tribs of concern: Big 8 Mile, Big 18 Mile, Big Timber, Little Timber, and Mill Creek
- **Available Water**: Quantify tributary discharge at Lemhi River confluence, mainstem Lemhi River
- **Scenario Analysis:** Evaluate proposed WR given flow criteria, irrigation method
- **Cumulative impacts** from multiple proposed WR, irrigation method change
- **Ecological Impact:** Connect stream flow with fish habitat models


QUESTIONS

LRBM Scenarios

Carter Borden, Ph.D.

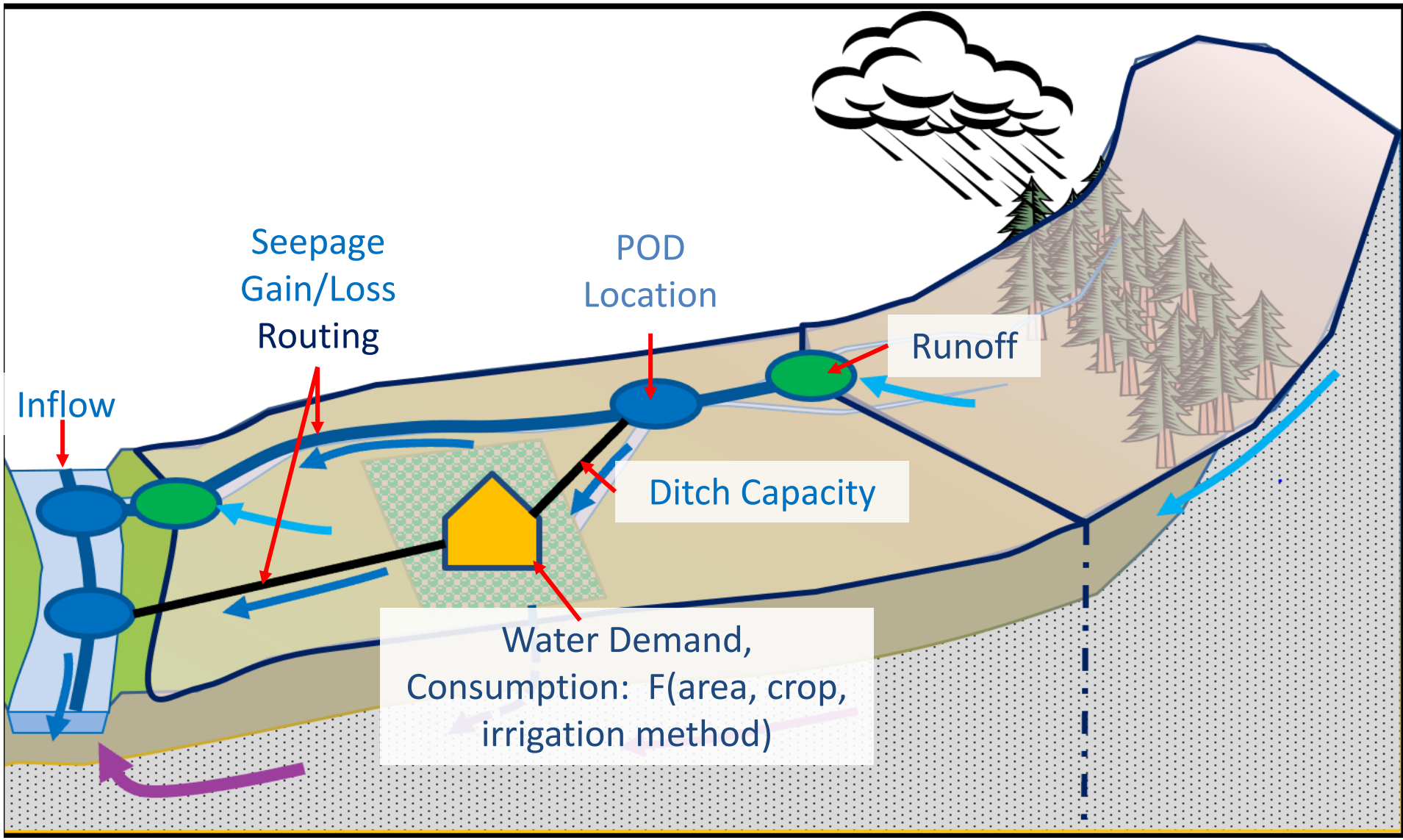
Sept 24, 2020

LRBM Scenario Formulation

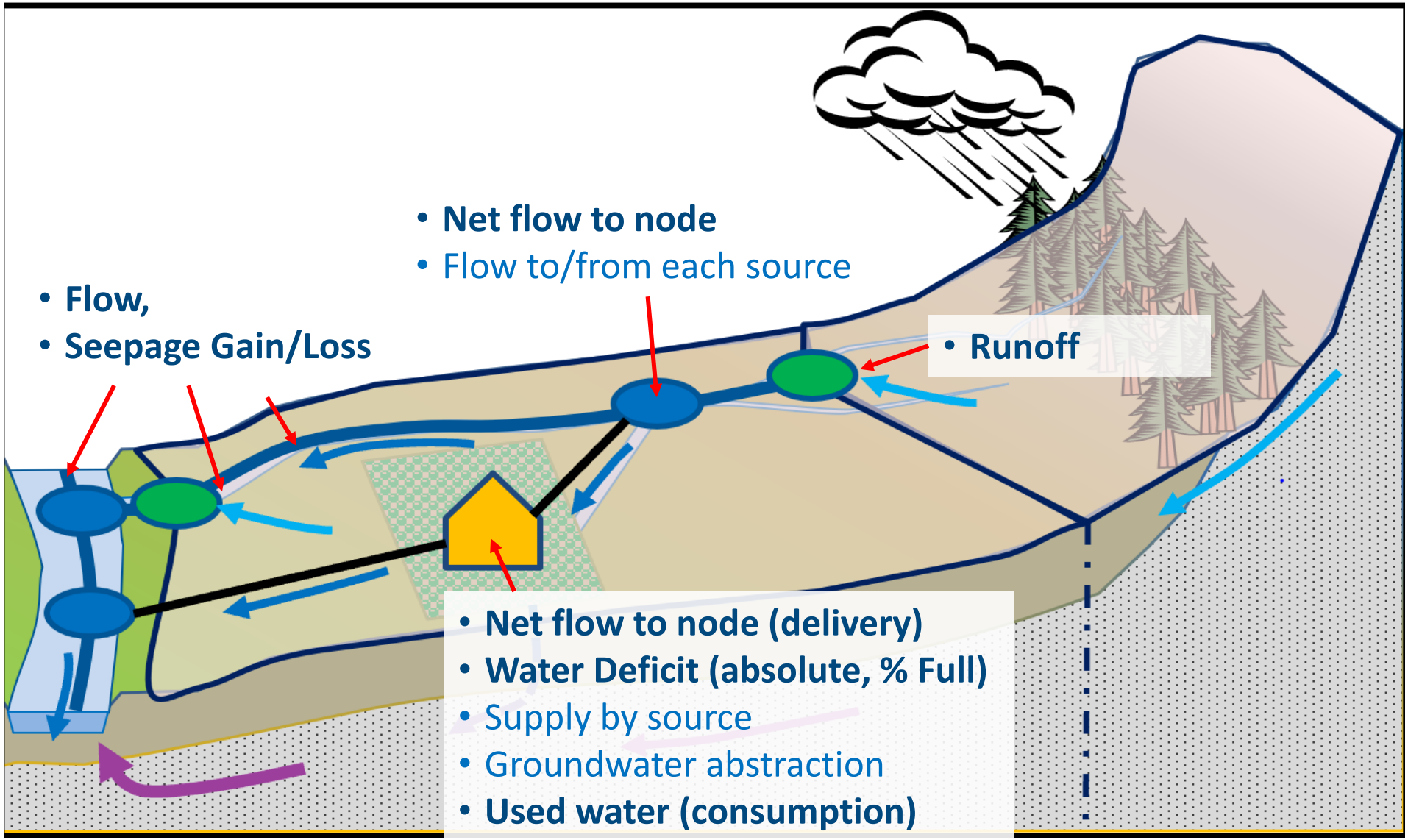
Scenario Formulation Steps:

1. Define a water resource issue
2. Define management alterative
    a) Select model input to change
3. Determine how it is to be evaluated
    a) Evaluation criteria
    b) Select model output to retrieve
    c) Post-processing output

LRBM Inputs


Seepage
Gain/Loss
Routing
POD
Location
Runoff
Inflow
Ditch Capacity
Water Demand,
Consumption: F(area, crop,
irrigation method)

LRBM Outputs



LRBM Scenario Formulation

Proposed Scenario:

1. Define a water resource issue

2. Define management alterative
   a) Select model input to change

3. Determine how it is to be evaluated
   a) Evaluation criteria, b) model output, c) Post-processing

SUGGESTED LEMHI SETTLEMENT GOALS AND OBJECTIVES*

1. **SCR 137 Legislative Directive**: "Develop a comprehensive settlement that resolves current tensions and conflict that are the result of competing water supply demands in the Lemhi River Basin . . . consistent with past practices, future needs, and Idaho law."
2. **Lemhi Basin Biological and Business Settlement Goals** – "Conserve, restore, and enhance sufficient habitat to sustain viable fish populations while protecting private property rights and preserving and enhancing the farming and ranching lifestyle and economy of the Lemhi River Basin."
3. **Water Settlement Objectives**:
    a. Resolve state and private objections to pending applications and permit 74-16187 in Big Timber, Little Timber, Mill, Big Eightmile and Eighteenmile basins.
    b. Protect high flows throughout the Lemhi Basin consistent with the Lemhi Conservation Agreement.
    c. Establish minimum flow water rights and flushing flow conditions in selected tributary streams consistent with the Lemhi Basin biological and business settlement goals and the Basin 74 separate streams general provision.
    d. Provide for future development of new water rights consistent with objectives a. – c. above, and the Wild and Scenic subordination provisions.
    e. Minimize ESA risk to water users to the extent practicable.

*The Facilitators, Norm Semanko and Clive Strong, drafted the Lemhi Goals and Objectives set forth above to facilitate discussion between the water users participating in the Lemhi Settlement Working Group. The suggested goals and objectives were derived from SCR 137, prior Lemhi Conservation Agreement, the Lemhi and SRBA decrees and the Lemhi Settlement Working Group discussions. A portion of the the September 24th Working Group Meeting will focus on developing the groups settlement goals and objectives for the Lemhi Bain.

State of Idaho
DEPARTMENT OF WATER RESOURCES
322 E Front Street, Suite 648 • PO Box 83720 • Boise ID 83720-0098
Phone: (208) 287-4800 • Fax: (208) 287-6700
Website: idwr.idaho.gov • Email: idwrinfo@idwr.idaho.gov

BRAD LITTLE
Governor

GARY SPACKMAN
Director

To: Lemhi Basin Water Settlement Parties

From: Shelley Keen, Angie Grimm, Scott Storms, and Mat Weaver
Idaho Department of Water Resources

Date: September 22, 2020

RE: Summary of questions raised during Lemhi Basin Water Supply Settlement Discussions regarding Idaho Department of Water Resources ("IDWR") water right processing in the Upper Salmon River Basin, and IDWR staff responses.

1. How does IDWR's accounting of water right subordination to finite future uses, as required under the Wild and Scenic Agreement[1] ("WSA"), handle domestic, stockwater, and municipal water rights?

Domestic rights that fit the definition *in Idaho Code § 42-111* are labeled as "Domestic Use" under the "Reasons not Subject to Curtailment" field in the WSA database and no debited rate or acres are entered into the database. This provision is fully outlined in Sec. 10.b.(3) of the Salmon Wild and Scenic River ("SWSR") Decree. If the *domestic* use does NOT meet the definition in *Idaho Code § 42-111*, the *domestic* use is entered as "Benefiting from Subordination Provisions" under the "Reasons not Subject to Curtailment" field in the WSA database, the *domestic* use rate is entered in the debited rate field, and the rate is debited against the 150 or 225 cubic feet per second ("cfs") provisions described in 10.b.(6)(A) of the SWSR Decree (i.e. the "carve-outs").

De minimis *stockwater* uses that fit the definition in *Idaho Code §§ 42-1401A(11)* as further limited and defined by *42-111(3)* are labeled as "De minimis Stockwater" under the "Reasons not Subject to Curtailment" field in the WSA database and no debited rate or acres are entered into the WSA database. This provision is fully outlined in Sec. 10.b.(4) of the SWSR Decree. If the *stockwater* use does NOT meet the definition in *Idaho Code §§ 42-1401A(11) and 42-111(3)*, the *stockwater* use is entered as "Benefiting from Subordination Provisions" under the "Reasons not Subject to Curtailment" field in the WSA database, the *stockwater* use rate is entered in the debited rate field, and that rate is debited against the carve-outs.

All water rights, either held by a municipality incorporated under *Idaho Code §§ 50-101 and 50-102* or an authorized franchise service provider for an incorporated municipality, with a municipal beneficial use purpose as defined in *Idaho Code § 42-202B(6)* are labeled as "Municipality" under the "Reasons not Subject to Curtailment" field in the WSA database. If there is an individual hookup connected to the municipal system with a flow rate of 2 cfs or greater, the entire rate of that hookup is entered into the "Municipal Hookup >4 inches" field in the WSA database and the

[1] The Wild and Scenic Agreement refers to the signed stipulation for settlement of objections to instream federal reserved water rights claimed pursuant to the Wild and Scenic Rivers Act. The Wild and Scenic Agreement stipulated to the decree of federal reserved instream water rights on the Main Salmon, Middle Fork Salmon, Rapid, Selway, Lochsa, and Middle Fork Clearwater Wild and Scenic Rivers, collectively referred to as the "Wild and Scenic Water Rights."

diversion rate is debited against the carve-outs. If there are no individual connections to the municipal system greater than or equal to 2 cfs, no diversion rate is entered into the corresponding field of the WSA database or debited against the carve-outs. This provision is fully outlined in Sec. 10.b.(5) of the SWSR Decree.

If the *municipal* use is NOT for an incorporated municipality, the *municipal* use is entered as "Benefiting from Subordination Provisions" under the "Reasons not Subject to Curtailment" field in the WSA database, the *municipal* use rate is entered in the debited rate field, and that rate is debited against the carve-outs.

2. How does IDWR tally the 150 cfs and 5,000 acre limit?

When IDWR receives a water right application[2] that proposes diversion of water tributary to the SWSR reach, it is reviewed by an agent who enters the application information into the WSA database. The agent is responsible for determining which, if any, subordination provisions of the SWSR Decree apply to the new application for water right permit. If provision 10.b.(6)(A)(i) (the 150 cfs / 5,000 acre carve-out) applies to the water right application for permit, the reviewing agent is responsible for entering the rate associated with the application that should be debited against the 150 cfs carve-out. If the application is for irrigation, the reviewing agent is also responsible for entering the number of acres associated with the application that should be debited against the 5,000 acre carve-out. Once the entered data is saved, the WSA database automatically deducts the rate, and if for irrigation the acres, from the running total and those totals are reported and saved to the Wild Scenic Summary Report, an Excel spreadsheet report that is regularly published to IDWR's webpage.

As IDWR subsequently processes an application through the permit and license stages, processing agents are responsible for entering any changes to the rate and acres into the WSA database. Only one row of data is associated with each water right number, so as an agent accesses a given water right and makes changes, those saved changes overwrite the previous numbers and the running totals are automatically adjusted accordingly.

3. How does IDWR tally the 225 cfs and 10,000 acre limit?

IDWR is currently not tallying the 225 cfs / 10,000 acre carve-out established in provision 10.b.(6)(A)(ii) of the SWSR Decree. IDWR's practice to date has been to generally utilize the full extent of the 150 cfs / 5,000 acre carve-out in provision 10.b.(6)(A)(i) before debiting against the 225 cfs /10,000 acre carve-out. IDWR recognizes the need to address and track the 225 cfs / 10,000 acre carve-out, especially once the 150 cfs / 5,000 acre carve-out is fully utilized, and progress towards addressing this need is currently underway.

[2] Section 10.b.(6)(A) of the SRWS Decree subordinates the federal reserved Salmon Wild and Scenic water rights to water rights "claimed or applied for after the effective date of the *Stipulation*." As of the publication date of this memo, IDWR has not completed evaluating claims subject to provision 10.b.(6)(A). IDWR is currently preparing to fully audit and review all WSA database data and correct any errors and through the process will evaluate whether claims have been appropriately included in the database. IDWR hopes to commence the database audit by the end of 2020.

4. **How does IDWR tally the 150 cfs and 5,000 acre limit when issuing a supplemental irrigation water right? Are supplemental rights the same as replacement rights as described and defined in the SWSR Decree?**

   Typically, IDWR debits the full diversion rate and acres of a supplemental irrigation right against the 150 cfs / 5,000 acre carve-out and enters the values into the WSA database.

   Provision 10.b.(6)(C) of the SWSR Decree states "replacement water rights shall not be deducted from the subordination amounts identified in this [decree]." The provision also defines replacement water rights as "irrigation appropriations issued for the same purpose of use and place of use covered by an existing water right with no increase in period of use, diversion rate, and, if applicable, volume of water." The provision goes on to list three criteria for determining if a right is a "replacement right." Replacement rights are not deducted from the subordination amounts. The three criteria are:

   i. no element of the new appropriation may exceed that of the original water right;

   ii. only the original or the replacement water right or part of each water right may be used at the same time; and

   iii. the replacement water right cannot be used when water would not be legally and physically available under the original water right.

   Supplemental rights are not replacement water rights as described and defined under the SWSR Decree. Supplemental rights do not meet the third criterion of a replacement right because they are used when water is not "physically" available under the original (primary) water right. In other words, the rate and acres of the supplemental right count against the 150 cfs / 5,000 acre carve-out because the land would not be irrigated after the primary right's priority cut if the supplemental right were not available for use.

5. **How does IDWR intend to tally the 225 cfs and 10,000 acre limit when issuing a supplemental irrigation water right?**

   IDWR does not intend to track supplemental irrigation rights any differently in the 225 cfs / 10,000 acre carve-out than it has as part of the 150 cfs / 5,000 acre carve-out; the full rate and acres of a supplemental irrigation right will be entered into the WSA database and debited against the 225 cfs / 10,000 acre carve-out.

6. **Are applications for water right permit included in the published tallies?**

   Yes, once a water right permit application is deemed acceptable per *IDAPA Rule 37.03.08.035.03*, the water right permit application information is entered into the WSA database in the manner outlined in the answer for question 2 above.

7. **Why doesn't the on-line individual water right summary publication match the on-line overall basin summary publication?**

   Through the course of preparing this memo, IDWR identified a bug in the WSA database program that prevented the on-line report publications from updating properly from the IDWR enterprise system. That bug is fixed. The water right summary and overall basin summary on-line reports match now.

8. Why isn't WR application for permit 74-16030, proposing the diversion of 175 cfs of Lemhi River water for irrigation in the on-line publication of individual water rights that count towards the future development subordination limits?

The Timber Creek Water Users Company filed Application 74-16030 in 2015 for use of high flows occurring in the Timber Creek drainage. The water use proposed in Application 74-16030 should not benefit from the subordination provisions in the SWSR decree. Water right filings that do not benefit from the subordination provisions are not listed in the online tracking system, although IDWR should consider doing so.

Application 74-16030 proposes an additional amount of water for lands that already have appurtenant irrigation water rights from the same water sources, Big Timber Creek and Little Timber Creek. IDWR interprets the subordination provisions of the SWSR decree to mean that water rights for irrigation should not enjoy the benefits of subordination when they result in an overall diversion rate of more than 0.02 cfs per acre, except when the total area irrigated is five acres or less. This interpretation is stated in the 2015 *Final Order Approving in Part and Rejecting in Part Application For Permit No. 74-16004*:

> Approval of the irrigation component of this application for permit, if unsubordinated as sought by Purcell, would count against the 150 cfs of water set aside for future development. It is not in the local public interest to allocate the limited water reserved for future development in the Wild & Scenic Agreement for supplemental irrigation uses that do not result in actual new development of irrigation projects or other new beneficial uses in the basin.

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Also,

> [I]t is contrary to the conservation of water resources to appropriate the limited supply of water available for new development from the Main Salmon River and its tributaries for the supplemental irrigation use sought by Purcell especially when existing irrigation rights already exceed 0.02 cfs per acre and such supplemental irrigation use is already authorized by a general provision.

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Section 3.f.(1) of the 2004 *Stipulation and Joint Motion for Order Approving Stipulation and Entry of Partial Decrees* requires IDWR to state in the public notice whether it "has determined" that an application for permit "will enjoy the benefit of any subordination provisions." The public notice for Application 74-16030 did not state that the proposed appropriation would enjoy the benefit of any subordination provisions. Instead, it stated, "Permits will be subject to all prior water rights."

The WSA database records why each water right would not be subject to curtailment to satisfy the SWSR decreed water right. The tracked rights fall into two categories: those that benefit from the 10.b.(6)(A) subordination provisions and those that benefit from the provisions of 10.b.(1), 10.b.(2), 10.b.(3), 10.b.(4), 10.b.(5), and 10.b.(6)(C). Currently, there is no place in the tracking system for applications that will not benefit from the subordination provisions. Section 3.e.(1) of the 2004

Stipulation and Joint Motion for Order Approving Stipulation and Entry of Partial Decrees states that online data will "identify all accepted applications for permit and all water right claims with points of diversion located upstream from the ending points of the water rights confirmed by the Partial Decrees." IDWR's online search tool for water right records satisfies this requirement. However, it might be useful to display this category of appropriations in the WSA database along with those that benefit from the subordination provisions. It will give the public confidence to know that IDWR has identified the appropriations and evaluated how they will be administered relative to the federal reserved minimum stream flow (MSF) rights.

9. **Why are three water rights with priority dates before the Snake River Basin Adjudication commencement date (November 19, 1987) included in the on-line publication of individual water rights that count towards the future development subordination limits?**

   IDWR does not currently know definitively the reason for their inclusion. IDWR is currently preparing to fully audit and review all WSA database data and correct any errors and through the process will evaluate whether these water rights are appropriately included in the database. IDWR hopes to commence the database audit by the end of 2020.

10. **Why are there seven water rights with priority dates before the stipulation date of the WSA included in the on-line publication of individual water rights that count towards the future development subordination limits?**

    The answer to question 9 equally applies to this question.

11. **Why are there water rights with a 0.02 cfs diversion rate limit (i.e., domestic use default diversion rate) included in the on-line publication of individual water rights that count towards the future development subordination limits?**

    Water rights that were applied for as irrigation use, or as any other beneficial use that does not fit into provisions 10.b.(1), 10.b.(2), 10.b.(3), 10.b.(4), 10.b.(5), and 10.b.(6)(C) of the SWSR Decree, have been debited against the 150 cfs / 5,000 acre carve-out regardless of the amount of the diversion rate. The definitions of domestic use in *Idaho Code §§ 42-111(1)(a)* & *(b)* are not dependent just on the diversion rate. For domestic use as defined in *Idaho Code § 42-111(1)(a)*, the actual use and the area irrigated must be considered with the daily diversion volume of 13,000 gallons per day. For domestic use as defined in *Idaho Code § 42-111(1)(b)*, the daily diversion volume of 2,500 gallons per day must be considered with the diversion rate.

12. **Do water rights with "wastewater" as the identified source count towards the future development subordination limits?**

IDWR is not aware of an exemption in the stipulation or partial decrees for wastewater rights. As a result, IDWR has added water rights identifying wastewater as a source to the WSA database. Furthermore, wastewater rights represent new uses of water that would—through return flows—otherwise be available to satisfy downstream water rights, including the federal reserved MSF rights, so they should be administered by priority with other water rights.

13. **Is there a memo or guidance document published on-line detailing IDWR's tally methods?**

IDWR adopted Administrative Application Processing Memo No. 70 (AP70) on October 30, 2009. AP70 "interprets language within the Wild & Scenic Agreement and the partial decrees for the Wild & Scenic Water Rights for purpose of recording, tracking, and administering water rights in the

watersheds of the Wild & Scenic Water Rights" (including the Upper Salmon River basins). IDWR staff use AP70 to guide and inform water right processing in the Upper Salmon River basins. AP70 is available online at https://idwr.idaho.gov/legal-actions/guidance-documents/.

14. **Do IDWR's "water right records" (i.e., water right processing files) identify or establish irrigation methods (e.g., flood irrigation, sprinkler irrigation, etc.)?**

    Water application method is not an element of a water right, and IDWR does not routinely maintain database records of water application methods associated with a given water right. That being said, water application methods are often noted in the application for permit and the beneficial use field examination for a given water right. Applications for permit and beneficial use field examinations made for licensing purposes can be found in the digital and paper records of the water right. Digital images of the water right records can be viewed online at https://idwr.idaho.gov.

15. **Will IDWR stop issuing water rights in the Upper Salmon Basin once the subordination carve-out limits (i.e., 150 cfs / 5,000 acres and 225 cfs / 10,000 acres) are fully appropriated?**
    IDWR will not stop issuing new water rights once the subordination carve-out limits are fully appropriated. Previously issued water rights might be abandoned or not used, at which time junior water rights could appropriately enjoy subordination and divert and use water. Also, subordination to the federal reserved MSF water right only applies during certain flow conditions. Under other flow conditions (i.e., flow at Shoup Gage >28,400 cfs), per the SWSR Decree, no regulation is required to protect the federal reserved MSF water right and all junior water rights can divert if there is sufficient flow above 28,400 cfs to satisfy their diversion rates.

16. **What happens if IDWR issues a "junior" water right permit before a "senior" water right permit?**
    The issue date of a water right permit has no bearing on the priority administration of a water right. As soon as the "senior" water right is permitted, both the junior and senior water right will be administered according to their respective priority dates, regardless of the respective dates the permits were issued.

17. **For the purpose of water right administration, how does IDWR determine when flow rates exceed 13,600 cfs at the Shoup gage?**

    Administration of water rights to satisfy the SWSR decreed water right is the function of the watermaster of Water District 170 (WD 170). As a starting point for WD 170, the US Geological Survey (USGS) publishes discharge data measured at the Shoup gage online at the following link:

    https://waterdata.usgs.gov/id/nwis/uv/?site_no=13307000&PARAmeter_cd=00065,00060,00010.

    According to provision 3.b of the SWSR decree, the watermaster must adjust the gage reading to account for "depletions from water rights enjoying . . . subordination." In other words, as AP70 states on page 9, "[T]he total of depletions to the flow at Shoup due to junior water rights must be added to the flow at Shoup to determine whether the flow at Shoup is 13,600 cfs or more." Currently WD 170 is not able to quantify all of the actual upstream junior depletions. Some diversions upstream from the ending point of the SWSR water right—primarily in Basin 75—do not have measuring devices installed yet. In addition, more stream gages are needed on tributaries to the Salmon River, especially those tributaries with minimum stream flow water rights. In 2009, IDWR used the water rights database to estimate a total upstream junior depletion of about 450 cfs,

if all rights junior to the SWSR decreed right were diverted. IDWR has not updated the estimate since 2009.

18. For the purpose of water right administration, how does IDWR determine when the Wild and Scenic River decreed flow is not satisfied?

See the response to Question 15 for the answer relative to provision 3.b of the SWSR decreed water right.

For provision 3.a of the SWSR decreed water right, AP70 states on page 10, "If the mean daily flow on a given date at the Shoup gage is less than 13,600 cfs, but equal to or greater than the amount shown in Table 3 for the date, then the water right is considered satisfied. Table 3 summarizes the regulatory action required to satisfy the federal reserved water rights." Table 3 is reproduced below. Note that the flow rate at Shoup in the top row is adjusted from 13,600 cfs to 13,150 cfs (a difference of 450 cfs) for the reason described in the response to Question 15.

Period of Use	Discharge at Shoup (cfs)	Regulatory Action
Jan. 1 - Dec. 31	> 13,150 and ≤ 28,400	All junior water rights not enjoying the benefits of subordination will be regulated.
Jan. 1 - Dec. 31	> 28,400	No regulation necessary to satisfy SWSR decreed water right.
January 1-15	< 1440	Junior water rights not enjoying the benefits of subordination will be regulated on a priority bases to supply the discharge required at the Shoup Gage for the corresponding period of use.
January 16-3I	< 1450	
February 1-15	< 1500	
February 16-28(29)	< 1550	
March 1-15	< 1510	
March 16-31	< 1540	
April 1-15	< 1590	
April 16-30	< 2470	
May 1-15	< 3920	
May 16-31	< 7310	
June 1-15	< 9450	
June 16-30	< 7790	
July 1-15	< 4730	
July 16-31	< 2700	
August 1-15	< 1390	
August 16-31	< 1240	
September 1-15	< 1200	
September 16-30	< 1400	
October 1-15	< 1570	
October 16-31	< 1700	
November 1-15	< 1820	
November 16-30	< 1730	
December 1-15	< 1600	
December 16-31	< 1510	

*See AP70 Section III for a description of rights enjoying the benefits of subordination. When the flow at Shoup is >1,280 cfs, the 225 cfs block of future uses enjoy the benefits of subordination and will not be regulated.