

# NORTH FORK PAYETTE RIVER WATERSHED COALITION WORK GROUP:



## Stream Conditions



### KEY CONCERN OF GROUP

IDEQ lists temperature, sediment, and nutrients as major impairments for streams in our watershed

### NEXT STEPS

Work with irrigators, landowners, and other stakeholders to mitigate stream impairments and improve watershed health

### TOP PRIORITIES

- INCREASE CASCADE TRIBUTARY FLOWS
- REDUCE FISH ENTRAINMENT IN IRRIGATION SYSTEMS
- PROTECT AND IMPROVE RIPARIAN AND WETLAND CORRIDORS
- EDUCATE THE COMMUNITY ON IMPORTANCE OF HEALTHY STREAMS
- IDENTIFY NEEDS FOR INCREASED RESEARCH AND DATA COLLECTION

### CONTACT INFORMATION

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### IDEAL OUTCOME:

Increase summer flows in Cascade tributaries

### TOP PRIORITY: CASCADE TRIBUTARY FLOWS

Increasing the volume of water that reaches Cascade Reservoir will help improve water quality conditions in the reservoir as well as improving fish habitat and stream health in the tributaries themselves.

### ACTION ITEMS:

- IRRIGATION DISTRICTS IDENTIFY OPPORTUNITIES TO INCREASE INSTREAM FLOW
- IRRIGATION IMPROVEMENTS ALLOCATED TO SUMMER INSTREAM FLOWS
- INCREASE OVERALL STORAGE CAPACITY
- EXPLORE WATER TRANSACTIONS TO INCREASE SUMMER INSTREAM FLOW.
- IDAHO DEPARTMENT WATER RESOURCES (IDWR) INPUT

### IDEAL OUTCOME:

Improve connectivity and fish passage

### ACTION ITEMS:

- DEVELOP AN OPERATION AND MAINTENANCE PLAN FOR A FISH SCREENING AND PASSAGE PROGRAM IN THE WATERSHED.
- OBTAIN FUNDING FOR FISH SCREEN AND PASSAGE IN WATERSHED.

### TOP PRIORITY: ELIMINATE FISH ENTRAINMENT ISSUES

Boulder Creek, Lake Fork Creek, and the North Fork Payette River have unscreened diversions that entrain fish during the irrigation season. A fish screening and passage program in the watershed would eliminate entrainment issues and result in healthier fish populations, especially including migratory life histories.

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### IDEAL OUTCOME:

Improve and protect stream corridors

### TOP PRIORITY: RIPARIAN AND WETLAND CORRIDORS

Riparian vegetation acts as a natural filter for sediment, nutrients, and toxic chemicals that storm water and melting snow carry toward streams. Vegetation also helps prevent erosion of streambanks, thereby resulting in a deeper channel profile as opposed to more shallow, sandy zones. Lastly, healthy canopies provide shade and help reduce stream temperature.

### ACTION ITEMS:

- INVENTORIES OF STREAM CORRIDORS.
- LANDOWNERS INPUT ON BANK STABILIZATION, RIPARIAN PLANTING, AND RIPARIAN FENCING PROJECTS
- EXPLORE POTENTIAL USE OF 'VIRTUAL FENCING'
- COLLABORATIVE LAND EASEMENTS WITH PAYETTE LAND TRUST

### ACTION ITEMS:

- RESEARCH DEVELOPED AND EFFECTIVE EDUCATION AND OUTREACH PROGRAMS.
- IDENTIFY LOCAL LEADERS TO DEVELOP OF PROGRAMS.
- INCLUDE TARGET GROUPS E.G. DEVELOPERS AND LARGE LANDOWNERS.

### IDEAL OUTCOME:

Increase education and awareness on the importance of healthy streams, and how the community and landowners can help

### TOP PRIORITY: HEALTHY STREAM EDUCATION

Educating community members including recreationists, HOAs, developers and ranchers on the importance of a healthy watershed can go a long way in making strides towards improving the health of the watershed.

# NORTH FORK PAYETTE RIVER WATERSHED COALITION WORK GROUP:



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### IDEAL OUTCOME:

Fill in knowledge gaps where further data is needed

### ACTION ITEMS:

- WORK COLLABORATIVELY WITH OTHER AGENCIES TO DETERMINE WHERE FURTHER DATA IS WARRANTED.
- COLLABORATE TO PUT MONITORING PLANS AND PROTOCOLS IN PLACE.
- SEEK FUNDING TO SUPPORT MONITORING THROUGH THE COALITION.

### TOP PRIORITY: RESEARCH AND DATA COLLECTION

In order to determine where improvements are needed, how proposed projects may impact watershed health, and to track changes in the health of our watershed over time, more monitoring and data collection is needed.

Including data on: temperature and flow on ungauged tributaries, routine lake monitoring such as temperature, nutrients, algae, and stream corridor/riparian inventories to identify priorities for restoration work.



# NORTH FORK PAYETTE RIVER WATERSHED COALITION WORK GROUP:



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## RESOURCES

### Ideal Outcome: Increase summer flows in Cascade tributaries

- Several examples of this type of work exists throughout the west, including in Idaho. A few resources listed here:
- Allianceforwaterefficiency.org
- Idaho Water Transactions Program (IDWR)
- Upper Salmon Basin Watershed Program (OSC)
- Kendy et al. 2018. Water Transactions for Streamflow Restoration, Water Supply Reliability, and Rural Economic Vitality in the Western United States. Journal of the American Water Resources Association.

### Ideal Outcome: Improve connectivity and fish passage

- US Fish and Wildlife Service – Fisheries Restoration and Mitigation Act (FRIMA program)
- ODFW, WDFW, California Fish and Game, and Idaho Fish and Game all have established Fish Screening and Passage Programs
- Gale et al. 2008. Effectiveness of Fish Screens to Prevent Entrainment of Westslope Cutthroat Trout into Irrigation Canals. North American Journal of Fisheries Management.

### Ideal Outcome: Improve and protect stream corridors

- Rangelandsgateway.org/virtual-fence
- Payettelandtrust.org
- NRCS – Regional Conservation Partnership Program Easements
- Weconservepa.org – Riparian Buffer Protection Agreements
- Riparian Plant Reference Guide – Idaho Soil and Water Conservation Commission, 2014
- NRCS – Technical Supplement 3A – Stream Corridor Inventory and Assessment Techniques

### Ideal Outcome: Increase education and awareness on the importance of healthy streams, and how the community and landowners can help

- Landcan.org/pdfs/your-land-you-idaho-guidelines.pdf
- Environmental Quality Incentives Program (EQIP)
- Rural Community Assistance Corporation Septic System Program
- National Association of Conservation Districts Stewardship and Education Materials
- Lake\*A\*Syst – valleyswcd.org

### Ideal Outcome: Fill in knowledge gaps where further data is needed

- USGS Groundwater and Streamflow Information Program
- Heck et al. 2018. Monitoring stream temperatures – A guide for non-specialists: US Geological Survey Techniques and Methods, book 3, chap. A25, 76p
- NRCS – Technical Supplement 3A – Stream Corridor Inventory and Assessment Techniques

## GET INVOLVED

- HAVE SUGGESTIONS?
- WANT TO BE A PART OF THE COALITION?
  - SIGN UP FOR EMAILS
  - LEAVE A SUGGESTION IN THE BOX

