

Developing a Functional Flows Framework for the Great Salt Lake Basin

For more information contact

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What is a Functional Flow?

A seasonal **component of the natural streamflow regime** that provides distinct ecological, geomorphic and/or biogeochemical functions. For example, summer baseflow is a functional flow related to healthy water temperature for aquatic life.

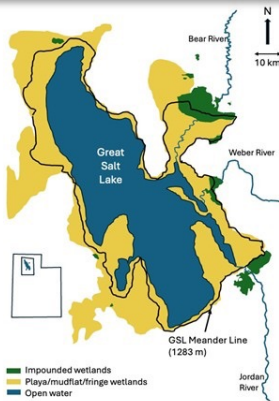
Metrics such as magnitude, timing, duration, and rate of change are used to quantify functional flows.

Why do functional flows matter?

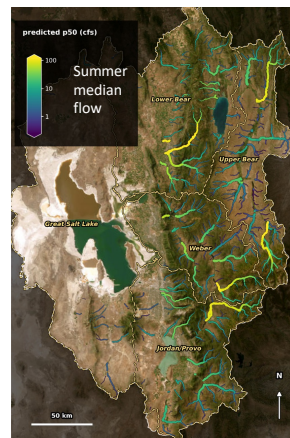
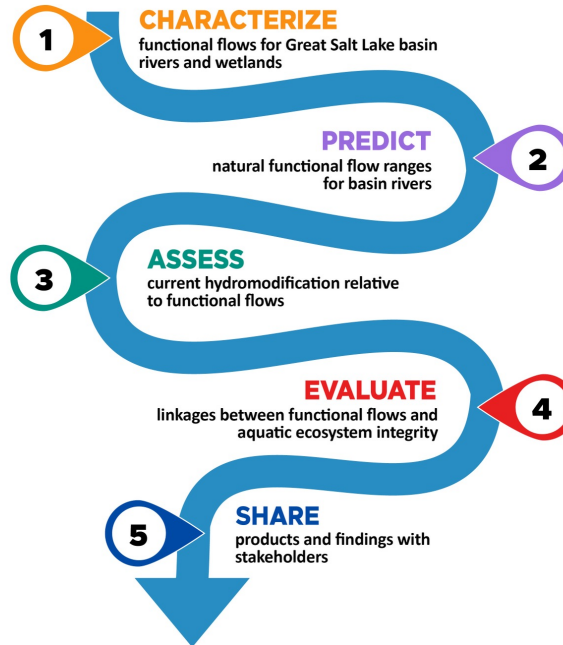
Utah is making **historic investments** in the Great Salt Lake (GSL) ecosystem. The Functional Flows Framework (FFF) tool will improve the **effectiveness** of water deliveries to GSL through better understanding of **when, where, and how much** water is needed to maximize benefits to upstream rivers and wetlands. It will help decision makers **evaluate tradeoffs** among ecological and societal needs and meet goals for water quality, fish, and aquatic life.

What is the project goal?

The goal of the FFF project is to **characterize and quantify functional flows** for Great Salt Lake (GSL) Basin streams and wetlands to support and maintain water quality and aquatic life uses.



Project Elements



EXPLORE
the GSL
functional flows
geodatabase



CALCULATE
functional flow
metrics using
this script

Who will use the Framework?

The FFF will be helpful for **any stakeholder** involved in **managing or protecting** the health of GSL, its wetlands, or tributary streams. Government agencies, water districts, watershed councils, scientists, and non-profits are among the intended users. The framework assumes that water management tradeoffs will need to be evaluated by **local resource managers and water users**. The FFF will help inform these but **does not prescribe** any specific decisions.



Fisheries
Water quality
Native plants



Drinking water
Irrigation
Water rights

What are the benefits?

- Metrics can be integrated into water planning and management models
- DWQ can consider hydromodification in water quality impairment decisions
- Metrics with ecological linkages can enhance restoration initiatives
- Accounting for interannual variability increases resilience of GSL waterbodies
- Functional flows promote improved water quality, economically strong river communities, resilient fisheries, and **healthy rivers, wetlands and lake**

Developing a Functional Flows Framework

for the Great Salt Lake Basin (CONTINUED)

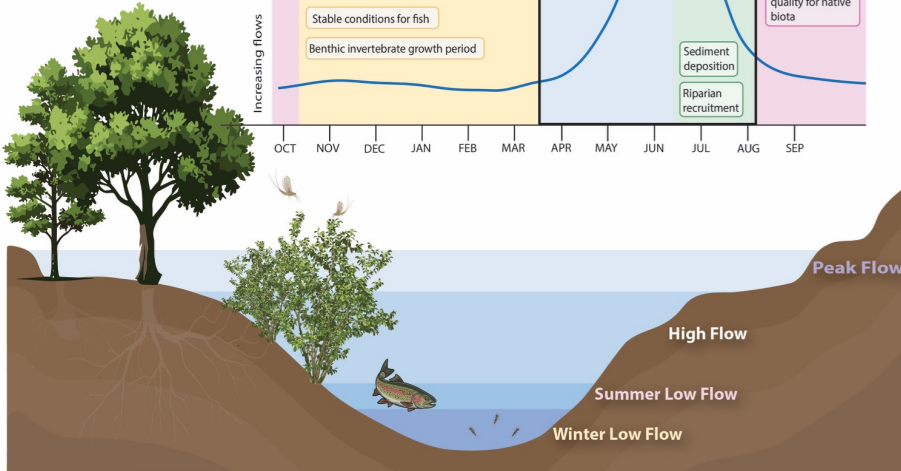
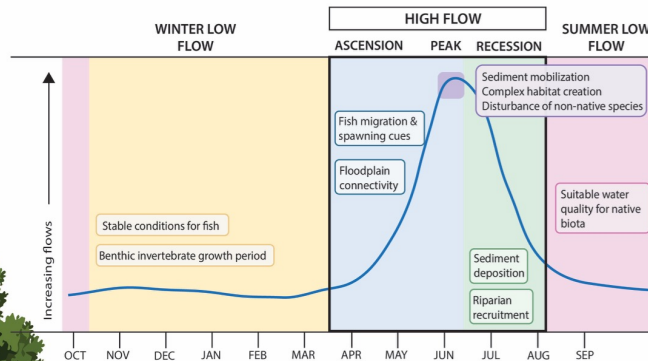
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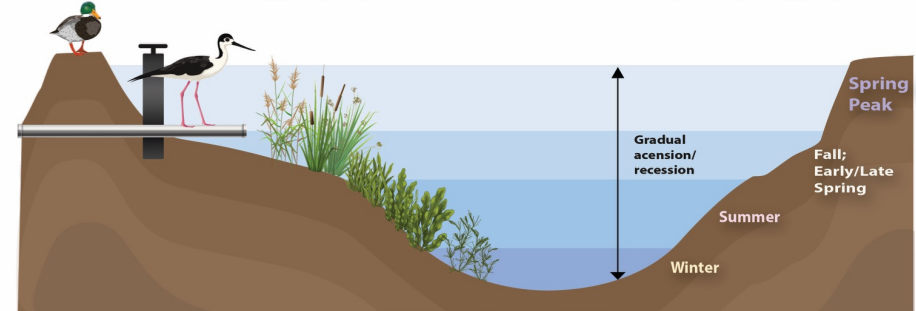
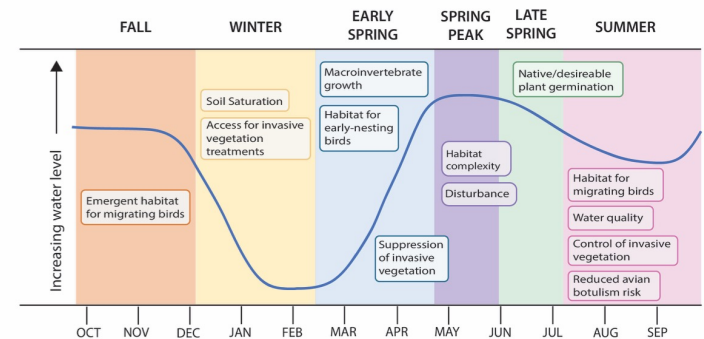
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Generalized functional flows for rivers and wetlands of the GSL Basin

Rivers



Managed Wetlands



LEARN MORE



PROJECT TEAM



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PROJECT FUNDING

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