Hydrology

Options for Increasing Hydrology

The site's capacity to clean and reuse stormwater exceeds the current amount of water landing on the site. A number of options exist for increasing the amount of water brought into the park to feed the interactive and cleansing properties within.

Stormwater Management / Movement

Water may flow through and exit the site in a number of ways depending on the program and topography of the final design.
Enhancement Options - Existing Wetland

Achieving significant open water may be accomplished by removal of soil layers above the site’s shallow bedrock. Removing eutrophic soils and adding depth to current water levels will allow for more deep water vegetation and restriction of cattail growth.

Enhancement Options - Wetland Mitigation

Type 4
Deep Marsh

Type 3 - Shallow Marsh
Shrub Carr

Shrub
Carr

Wet Meadow
Lowland Forest
Mud Flats
Shrub Swamp
Renewable Water Pumps

For pumping harvested rainwater to various features, numerous renewable technologies could become an iconic piece of the park infrastructure.

Biological Filtration - Stage 2

Biological methods are used to remove impurities. Tree trenches provide additional space for water storage and natural wading pools afford a place to get your feet wet, while sustaining a high water quality without the use of harsh chlorine.

UV Purification - Stage 3

Ultraviolet light is used as an integral part of the final polishing stage for water purification, allowing human contact by removing the possibility of waterborne parasites, bacteria, and viruses.
Interactions, Play, & Public Art

Expressing Ephemerality
Artistic installations serve as ephemeral capture and release points, exploring the natural beauty of water's sound, motion, and dynamism.

Water Collection and Storage
Throughout the site, water is highlighted with novel collection and display systems. From parking lot rain gardens to picnic pavilion green roofs, stormwater is demystified by removing it from pipes and putting it into the spotlight. Collected water is stored both above and below ground for later use.
Celebrating Hydrology

A water plaza near the parking lot and visitor building provides opportunity to splash around on a hot summer day. The plaza offers recreational opportunities throughout all of Minnesota’s seasons. Spaces are designed to create interesting ways to enjoy the out-of-doors, transitioning seamlessly from summer to winter.
A recycling circuit of Continuously Moving Water is the backbone of the park.

The circuit has a Cleansing Wetland Bench which provides diverse passive-use spaces & habitats.

At the confluence a Natural Wading Area highlights bio-cleansing methods with interactive features.