

Freestone Lake Management Plan

November 15th 2022

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Overview

Freestone Lake is the heart of the Wilson Ranch community and sets the aesthetic example for all development at Wilson Ranch. Balancing the preservation of its natural beauty and access to the lake for homeowners and Freestone guests requires consistent stewardship, engaged and involved leadership, adequate resources, and an informed community.

Much has changed since 2013 when the lake had its first published management plan. All lakeside homes have been completed or have active plans for completion, water rights management has become an urgent priority, and we can now foresee a fully developed community and the challenges that will bring.

The plan is built on a foundation of over 20 years of learning how to manage the lake and environs and serves as a vision for the future and a critical tool for setting priorities and communicating with owners. This plan is based on the following:

- Wilson Ranch CC&R's and Design Review Guidelines
- Freestone Lake Management Plan dated March 20, 2013
- Expert assessment of:
 - Lake and aquatic species health
 - Weed and invasive plants
 - Water conservation plans for Wilson Ranch

With this in mind, this plan sets direction for long term management of Freestone Lake and the common areas immediately surrounding it.

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Lake Committee Governance Process

- The chairman shall be elected annually from among the members of the Committee by majority vote of said members.
 - Calls and facilitates meeting
 - Prepares report to the board
 - Oversees preparation and ongoing management of the lake plan
- Meets a minimum of 2 times per year
- Charter: the committee acts in accordance with Wilson Ranch CC&R's, design guidelines, and common-sense management principles to ensure the lake and common areas are managed appropriately
- Scope:
 - Prepares and publishes a lake management plan at a minimum every 5 years
 - Reviews existing lake management plan, determines whether interim updates are required
 - Reviews and approves projects and expenses for budgeted items and proposes ad-hoc projects as necessary
 - Advocates for all Wilson Ranch Association members with respect to the lake and common areas around the lake
 - Arbitrates disputes balancing individual property owners' and Wilson Ranch Association perspectives

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Lake committee:

- Volunteers encouraged!
- Elected annually
- Elect a chair
- Work with property manager
- Review and update plan as needed



Area covered by this plan

The plan addresses all of Freestone Lake including the waterfall area and the wetland area at the opposite end (see Figures 1 and 2). It also includes the immediate setting of the lake and all common areas (shaded yellow) between the lakeshore and the roads. It does not cover private land belonging to individual owners or land belonging to the Freestone Inn.

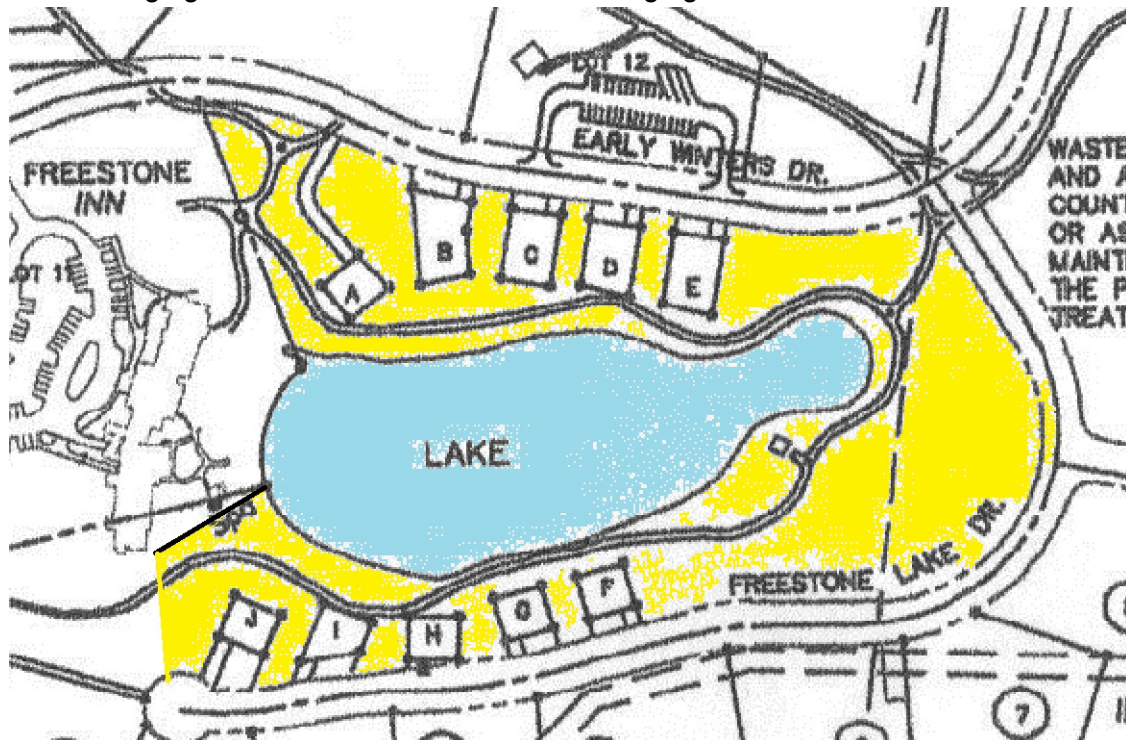


Fig 1. Lake management area (yellow). All lines approximate

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Fig 2 Lake management area (orange) All lines approximate

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Guiding Principles

Aesthetic

The Lake Committee recognizes the balance that must be struck to impart a sense of natural beauty to the human eye. Most often, what we perceive as natural beauty involves careful planning and management. Truly unmanaged environments quickly appear overgrown and unkept. Freestone Lake is no exception. Left on its own, cottonwoods would dominate the lake edge, weeds and invasives would dominate the surrounding environs, and paths around the lake would change accordingly.

On the other hand, a highly managed environment like an “English garden” or “country club” would appear out of place in the context of North Cascades and the surrounding forest land.

Freestone Lake requires ongoing maintenance to maintain its natural appearance. See the Landscape section for further description.

Management

The Lake Committee establishes long term direction, sets annual priorities, and provides quarterly oversight of activities in and around the lake working with Wilson Ranch Association and Freestone staff to implement. See Lake Committee charter and operating cadence below.

Dispute Resolution

The Lake Committee is inclusive and encourages differing opinions regarding the lake. It will strive to fully understand the perspectives of those opinions and will provide due process for escalating opinions appropriately.

It is expected that from time to time, Wilson Ranch homeowners may have a disagreement with plans that affect the lake area. They may petition the board to hear their dispute through the Wilson Ranch Homeowners dispute process.

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Lake and Aquatic Environment

Aesthetic

- Maintain and enhance the natural beauty of the lake environs and lakeshore

Lake Access Management

- Encourage access from beach areas to reduce erosion
- Educate lake users on proper lake usage to maintain natural setting
- No motorized aquatic craft

Swimming

- Proper signage and safety equipment
- Liability assessment

Fish and Fishing

- Stewardship to maintain aquatic life populations
 - Benchmark “ideal” fish population and monitor yearly
 - Enhance natural habitat to maintain insect and bird life
 - Eliminate herbicide or other chemical run-off in the lake environs
- Educate users on fishing rules
 - Fly fishing only
 - Single barbless hook
 - Catch and release only

Weed control

- Monitor aquatic weed growth
- Recommend weed reduction

Lake Health Assessment

- Periodically sample water
 - Dissolved oxygen
 - Other parameters as needed

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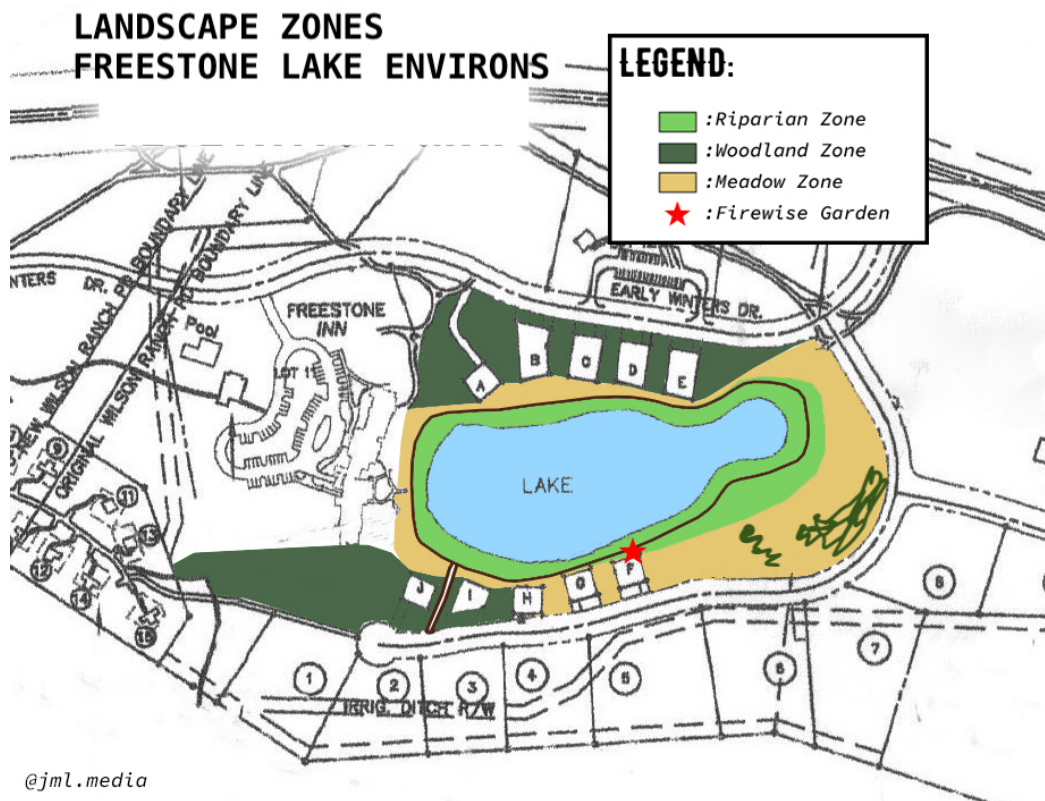
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Landscape

Overview

Freestone Lake environs consists of 3 basic landscape zones, as well as a structured trail and a demonstration garden (see map). In general, the vegetation plan is simple and low maintenance. While much of the lake landscape is mature, there are still sections in active restoration, and areas of trail that have not been completed.

- **Riparian zone**- features sedges, rushes, willows, cottonwood, and aspen.
- **Woodland zone**- mainly conifers (Douglas fir and ponderosa pine).
- **Meadow zone**- primarily fescue grasses (see FAQ for approved species), wildflowers, and native shrubs.
- **Trails** -allow access for recreation
- **Firewise Garden**- features native plants less prone to combustion that are also commonly found throughout the lake environs.



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Note that the map above on page 9 will be updated as the committee works through how each zone will be managed.

Weed Control

Weed control strategy in priority order

- Encourage establishment of native plant populations
- Minimize opportunities for weeds to spread or thrive
 - Avoid overwatering
 - Immediately follow any soil disturbance with seeding or planting
 - Keep paths of travel, e.g. trails and trailsides, as weed-free as possible.
- Remove emergent weeds before seed development (see table below for seasonal calendar)
- Apply herbicide when necessary, and look for opportunities to minimize use.

Native Plant Restoration

Restoration is a process that begins with clearing undesirable vegetation, then planting desirable species to compete. Weeding without re-planting simply results in a recurrence of weeds due to the existing soil seed bank. Re-planting, if not followed by regular weeding for 2-3 few years, allows weeds to repopulate. By nature, restoration begins with a somewhat contrived appearance, but within 2-3 years it evolves to a naturalized state. Borders, such as rock-lined gardens or trails become obscured or completely covered with natural vegetation.

Water Conservation

To meet an ongoing need to conserve water (to stay within our water right allocation) and to harmonize our habitat with the surrounding environment, lake height level and irrigation will be periodically reviewed and actively adjusted to match to the landscape needs. For example, spray irrigation to cottonwood and aspen will be reduced and converted to drip, where feasible and necessary. Many native plants, once mature, are drought tolerant.

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Invasive Species Management

Definition: plants (even natives) that grow quickly and out of control, supplant other plants, disrupt the local ecosystem, or cause other undesirable changes.

Cottonwood and aspen

These are important habitat trees for a variety of mammals, insects and birds. However, the ecological benefits are offset by the costs of management (herbicide treatment and pruning suckers) and loss of the lake view. Thus, a limited number of groves (one or two of cottonwood and two or three of aspen) will be retained and controlled.

Targets for manual removal (by hand and/or with tools)

Early-Season	Mid-Season	Late-Season
<ul style="list-style-type: none"> • Barnaby/Knapweed • Bulbous blue grass • Cheat Grass • Green bristlegrass • Dandelion • Salsify • Plantain common & English • Red sorrel • White campion 	<ul style="list-style-type: none"> • Alfalfa • Black medic • Spotted spurge • Mullein • Jerusalem oak goosefoot • Oxeye daisy • Pineapple weed • Sticky Cinquefoil • Perennial pepperweed • White & yellow sweet clover 	<ul style="list-style-type: none"> • Horseweed • Crown Vetch • Quackgrass • Prickly lettuce

Targets for herbicide application

Early-Season	Mid-Season	Late-Season
<ul style="list-style-type: none"> • Barnaby/Knapweed • Oxeye daisy • Yellow flag iris 	<ul style="list-style-type: none"> • Barnaby/Knapweed • Dalmation toadflax • Oxeye daisy • Western water hemlock • Purple loosestrife • Yellow flag iris 	<ul style="list-style-type: none"> • Purple loosestrife • Western water hemlock

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Lake Trails

Will be periodically leveled, graded, and maintained at approximately 2 feet wide. When needed, the trail surface will be replenished by a brown gravel provided by J. A. Wright construction.

Landscape Plan by Area

Overview

Freestone Lake is a vital attraction and is heavily visited by walkers, swimmers, fishermen, and bikers. This usage creates wear and tear that requires maintenance to keep the area accessible and to protect the surrounding landscape. Weeding and herbicide treatments apply to all areas. Additional tasks specific to the different zones are listed below.

Riparian Zone

A local fish biologist regularly monitors the health of the lake, and simultaneously assesses the lakeside vegetation.

- Thin cottonwoods and aspens
- Rake gravel spillage back onto trails

Meadow Zone:

- Sow fall grass seed
- Remove volunteer shrubs and trees, especially non-native or invasive species

Woodland Zone:

- Remove hazard trees (or cut into snags, if appropriate)
- Rake needles off paths and away from structures

Trails:

- Rake gravel back from the edges
- Prune and/or remove trailside vegetation

Firewise Garden:

- Prune to keep species separate for easy identification

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- Install and remove botanical labels seasonally
- Remove all volunteer plants

Landscaping Maintenance

Hired care is expensive and not always available. To date, it has been exceedingly difficult, if not impossible to hire weeding. Unfortunately, it is the most needed and most time-consuming of all of the lake area chores. This is especially true for the restoration areas which are prone to weeds because revegetation has commenced but not yet stabilized the ecosystem. Once all elements of the landscape have been built out and restored the amount of maintenance will sharply decline.

- Sweetgrass Restoration is our herbicide contractor. The typical schedule is 3 times a season.
- Contracted groundskeeping would ideally provide the remaining scope of care needed- weeding, pruning, raking, building/restoring trails, and seeding.

Budget

A proposed landscape maintenance budget of \$5,000 was established for 2023 and will be adjusted accordingly going forward. Working with the property manager/volunteers who have provided these services in the past can help a new contractor better focus the scope of work and reduce costs. A search for weeders shall be ongoing and some funds will be retained for this vital work.

Wilson Ranch Landscape Maintenance Cost Estimates

	May June	July	August	Sept.	Oct.	Nov.	2023 Budget allotment
ASSESS Walk lake trails for weeds, irrigation performance, and trail maintenance	X	X	X	X			Property manager role
INVASIVE SPECIES CONTROL- Herbicide contractor	X (or July)		X	X (or Oct)			\$1700
Manual weeding	8 h	8 h	8 h	8 h	2 h		\$1500

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Wilson Ranch Landscape Maintenance Cost Estimates

	May June	July	August	Sept.	Oct.	Nov.	2023 Budget allotment
SPREAD SEED Just prior to first snow						X	Property manager role
IRRIGATION- Adjust schedule	X	X	X	X			Property manager role
TRAIL MAINTENANCE							
Rake gravel/ Regrade trail					4 h		\$270
Pick up needles, mostly along the 2 lake trails	3 h				3 h		\$400
Pruning, shrub, & small tree removal		4 h			4 h		\$530

Firewise Garden

	May/June	July	August	September	October	November	Hours
Labels	Install				Remove		Property manager role
Weed	1 h	1 h	1 h	1 h			\$270
Prune	1 h		1 h				\$140

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FAQ:

Why care about weeds? They are generally non-native plants, often invasive and with negative impacts on the environment. They reduce biodiversity and wildlife habitat, and can increase fire risk.

Why are many Wilson Ranch weeds not included in the Okanogan County and Washington State Noxious Weed websites? These lists focus on weeds important to agricultural and horticultural lands. We have a different ecosystem with a different set of weeds.

What are volunteer or emergent plants? Those that come up in the landscape with no homeowner effort. They germinate from seeds dropped by plants in previous years, or seeds can arrive stuck to small animals. Birds bring seeds contained in berries and fruit they eat.

What is the recommended grass seed for our landscape? Grasses for the meadow areas were chosen in consultation with a local naturalist. Covar sheep fescue is used adjacent to trails and roadsides, and in areas where a lower “lawn” appearance may be desired. Firebreak® mix (available from Rainer Seeds in Davenport, WA) is used further away from trails where the taller species will not drop seed onto the trails.