Ranger Residence and Maintenance Shop

The historic ranger residence is a beautiful example of the National Parks Service Rustic Architectural style and is proposed to remain in its current location and use, with renovations. The public and stakeholders are very supportive of having a resident ranger at the park to improve safety and reduce potential for vandalism at this fairly remote park.

- The maintenance and ranger residence area will remain separate from the camping and day use areas and will be buffered by vegetation
- There is public support for a resident ranger at the site
- Restore historic ranger residence to allow for comfortable living conditions while preserving the historic structure. (with State Parks’ maintenance funds)
- Maintenance area circulation will provide entry and egress off of the new park loop road
- Create spatial separation and a vegetated buffer between the welcome center and the ranger residence to maintain ranger privacy, while allowing some views of the historic ranger house
Historic Interpretation Program Elements

Interpretive signs and historic artifacts will be incorporated into signs, seat walls, gateways, plaza paving throughout the park at locations including:

- Historic Picnic shelter (east)
- Schafer Family Monument and East Entry Plaza
- Welcome Center
- West Day Use Gathering Plaza
- West Picnic Shelter
- Discovery Landscape

Themes

- Logging History
- East Fork Satsop River
- Recreation History
- WPA
- Historic Tribal Use
Vehicular Circulation

Vehicular circulation and parking lots are pulled back away from the East Fork Satsop River, thereby opening up valuable riparian areas for habitat enhancement and also for expanded passive recreation opportunities such as picnicking, fishing, wildlife viewing and gathering. The existing park entries are converted to pedestrian gateways into the east and west areas of the park. A new clockwise, mostly one-way road system creates an efficient and easily navigated circulation system for the park, while improving safety and visibility.

Vehicular circulation attributes

- The West Area a two-way road dips south to minimize impacts to the existing mature conifer grove
- The West Area the current entrance is shifted south to increase the sight distance between the entrance and the bridge, and to create a one-way traffic exit
- The existing spur road to the maintenance burn pile is expanded into a two-way road with a loop turnaround for a hand-carry boat launch and universally accessible river access point.
- Park entrances are aligned with each other when possible and provide safe access points with good sight lines
- The number of park entrances is minimized for ease of ranger oversight
- Parking and roads are shifted away from the river significantly
- Day use loops and camp loops are separate to the maximum extent feasible
- Emergency vehicle access from the East Satsop Road West to the East campground loop is provided, along with a gate with emergency department-operable lockbox.
Vehicular Circulation Design Criteria

All roadways will be paved with asphalt, unless crushed rock surfacing is preferred in select locations to ease maintenance.

- Design is for the following vehicles: 40’ RV and 20’ vehicle with hitch and 20’ trailer
- Main entrance: two-way entry drive
- Sight distance requirements: Mason County Dept. of Public Works (using WSDOT standards) classifies park roads intersecting W. Schafer Park Road as intersections (rather than driveways). A design speed of 20 MPH on W. Schafer Park Road requires a sight distance of 221 feet for passenger cars and 280 feet for “single-unit truck/bus” from another intersection. The County will likely require a traffic study as the project progresses. Minimum 24-foot asphalt pavement width (12-foot lanes) for new two-way roads, 12-14 feet width for one-way roads, typical.
- Roads shall have a minimum internal radius of 30 feet (NFPA 1194, 2005)
- Road curves designed for use by all types of camping vehicles shall have a minimum radius of 35 foot internal and 50 foot external – Policy on Geometric Design of Highways and Streets. Request fire department review
- Dead-end roads, if any, that exceed 150 feet, shall provide an emergency vehicle turn-around including a 20-foot radius between the dead-end and pull out (if hammer head style; no parking zone in pull out)
- Day Use Area circulation and Campground Area circulation will be kept separate to the extent feasible to reduce traffic travelling through campground loops.
- Cross slope for drainage: minimum 2%

Parking

Day use area parking and campground overflow parking spaces are increased over the existing number of parking spaces in order to better accommodate visitors and campers. Parking is dispersed throughout the park in order to provide convenient parking at three day-use areas, in close proximity to the kitchen shelters, at comfort stations and at the Welcome Center. Handicapped accessible parking is included at each park structure and near primary river gravel bar/beach access points. Total parking spaces at the park is 140.

- 126 parking spaces are provided at day use areas
  - 14 campground overflow parking spaces are provided
  - 38 parking spaces are provided to accommodate up to 100-person gatherings in the large eastern kitchen shelter
  - Four larger spaces (for pickup and trailer) are provided near the hand-carry boat launch; these are parallel parking spaces
  - Five parking spaces are provided at the welcome center: one ADA, one ranger, three additional
- Standard parking stalls per State Parks and Mason County standards:
  - 9x18’ stalls & 10x20’ stalls with a 24-foot backup lane; total paved width from wheel stop to wheel stop is 60 feet. Assume double loaded or single loaded 90-degree parking.
  - ADA parking spaces shall have a minimum clear width of twelve and one-half feet and not less than twenty feet in clear length.
  - Parallel parking stalls along one-way road: 24’ x 8’
Trails

A hierarchy of paths will be developed throughout the site.

- Paths will be laid out using the existing alignment to the extent possible.
- New paths will be designed to provide access to the East Fork Satsop River and points of interest while minimizing impacts to critical areas.
- Paths that go through wetlands will be boardwalks supported by pin piles to avoid wetland impacts.
- All accessible paths will be developed to ADA standards and will be crushed rock, asphalt or boardwalk as dictated by site conditions.
- Maximum four-foot wide trails are allowed in Fish and Wildlife Conservation Areas and must be addressed in a No Net Loss mitigation plan (Mason County Community Services personal communication).
- Loop trails connect the East and West Areas
- 2% maximum cross slope
Pedestrian Bridge

- Potential for a focal feature pedestrian bridge across East Fork Satsop River in the East Area, high enough to avoid debris during flood events and located to avoid wetland impacts
  - Should be universally accessible.
  - Avoid the wetlands to the extent possible. Wetland and/or wetland buffer mitigation may be necessary.
  - A high elevation bridge with a long span is likely needed to cross the East Fork Satsop River.
- Pedestrian bridge design should be consistent with historic park character
Lighting

Minimal lighting will be provided at the Welcome Center, restrooms, and picnic shelters, and if required at drive entries. Light “cutoff” and distribution should be managed to avoid artificial light in camping areas. Maintaining dark skies within the park is important for habitat quality and to retain the ability for star gazing.

Utility Modifications

Septic Service

All new comfort stations will be served by on-site septic systems. The permit processes required for these new septic systems will be dependent upon the estimated maximum daily wastewater volume that is anticipated from each facility and whether or not each facility is viewed as an independent system or as part of an overall larger on site system. In general, if the facilities produce less than 3,500 gallons per day, they fall under Mason County’s jurisdiction and the county’s On-site Sewage System program. If the projected daily volume exceeds 3,500 gallons per day, permitting through Washington State Department of Health’s Large On-site Sewage System (LOSS) program will be required. Ultimately, the jurisdiction under which the systems are permitted will dictate how the site soils are evaluated and how the systems are designed and permitted.

Initial analysis of the proposed comfort stations, taking into account the number of campsites served, the maximum number of users per campsite and initial estimates of daily wastewater production from each user based on similar State Park usage, suggests that daily wastewater flows from the comfort stations vary enough to put some under Mason County jurisdiction and others under the States’ jurisdiction if viewed independently. If one system is developed under the States’ LOSS program, however, it may be prudent to develop all under that program to ensure uniformity in the permitting and operation/maintenance standards. Further discussion with county and state representatives will be required as these new systems are developed to determine the best course of action for design and permitting. Resolution of the site’s water right issues will also play a role in this process, as the site’s allowable water usage will ultimately dictate the number and type of facilities that can be supported at the site.

Domestic Water Service

The existing water distribution system is served by a mix of aging undersized mains. Replacing portions of this system (water mains), as well as installing new mains around the proposed campground loops, will be required to prevent excessive pressure loss through the distribution system.

The existing water system is served by a 5,000 gallon concrete reservoir. This reservoir is insufficient for the improvements proposed given the existing source production limitations. Further analysis of the water right issue and the ultimate service requirements of the system will be required to determine the level of storage capacity improvements needed for future build-out.
Water & Wastewater Plan

Washington State Parks and Recreation Commission

Schafer State Park

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