

Categorical Permission Alteration Description – 12. Fish Screens

The categorical permission covers fish screens, including drums, plates, cylindrical, cones, or other designs proposed for installation, modification, or replacement on water intake pipes. Associated facilities, such as maintenance structures, walkways, and supports, may be installed, modified, or replaced as well. The area of construction for fish screen support facilities must not exceed 1 acre.

When possible, fish screens should be positioned in the floodway in a fashion that results in a sweeping, eddy-free flow capable of moving fish and debris along and past the facility under all flow conditions.

Screens should be durable such that no individual component will detach from the structure or substructure of the screen during high water events.

Screens must be equipped with a manual or automatic apparatus to remove sediment and debris. With either type of apparatus, screens should be periodically cleared of accumulated debris which must be disposed of outside the limits of the project easement.

If heavy debris loading is anticipated, a trash rack should be installed in front of the screen. Screens must be designed in a way to prevent them from being hazardous to recreational activities (e.g., boating, swimming) in the vicinity of the screens.

If piles must be placed in the levee or the river bank near the levee to support the fish screen structure and/or pipes, those piles must be auger cast to the bottom of the impervious layer in the levee foundation. Beyond that point, piles may be driven.

If screens are proposed for installation on existing intake pipes, the pipes must be inspected to ensure that they are in good condition prior to retrofitting.

Maintenance requirements will vary depending on the type of equipment installed, but generally will include:

- Inspection of the screen and associated structure(s) for corrosion, wear, or other deterioration
- Maintenance of mechanical components and seals, with repair or replacement, as needed
- Checking the screen cleaning system for effectiveness
- Debris and sedimentation removal

Inspection of the area around the screen for erosion and scour

Categorical Permission Alteration Checklist – 12. Fish Screens

Please note, the following checklist is intended for planning purposes only and reflects information that USACE reviewers will look for when considering a Section 408 request for fish screens under the Categorical Permission. To be reviewed under the Categorical Permission, the proposed project must adhere to all requirements of the Categorical Permission, including the full alteration description (see previous page). The plans and narrative project description should reflect this information.

Screen(s) will be equipped with a manual or automatic apparatus to remove sediment and debris:

Screens will not be hazardous to recreational activities:

Maximum total area of construction for fish screen support facilities is one acre:

If piles must be placed in the levee or the river bank near the levee to support the fish screen structure and/or pipes, those piles will be auger cast to the bottom of the impervious layer in the levee foundation: Yes NA

If screens are proposed on existing intake pipes, the pipes have been inspected to ensure that they are in good condition: Yes NA

Any work within the levee embankment or foundation? Yes No

Hydraulic blockage calculation $\geq 1\%$? Yes No

Hydraulic model used for hydraulic analysis? Yes No