

WAC 220-660-250 Water diversions and intakes. (1) Description:

Surface water diversions are common instream features in agricultural areas where the water is used for irrigation. Throughout the state, people also divert water for other agricultural, hydropower, industrial, recreational, residential, municipal, and hatchery uses. A water right must be obtained prior to diverting water of the state.

(2) **Fish life concerns:** To protect fish life, including salmon and steelhead, Washington state law (RCW 77.57.070 and 77.57.010) requires that all surface water diversions be screened to prevent fish from being drawn into the diversions where they are at risk for injury or death from entrainment. Other elements of a water diversion can result in direct and indirect sources of injury or mortality. Wing and check dams can prevent or delay upstream and downstream fish passage increasing predation, and fish may be physically injured or dewatered by active cleaning mechanisms or in bypass mechanisms.

(3) Limit of department authority over water diversions and intakes:

(a) A written HPA is not required for emergency water diversions during emergency fire response. When possible, a person must notify the department before the emergency diversion. When advance notification is not possible, a person must notify the department within twenty-four hours of the emergency diversion, at the twenty-four-hour hotline phone number at 360-902-2536.

(b) The department cannot apply the hydraulic code to limit the amount or timing of water diverted under a water right, other than ensuring that there is sufficient bypass flow to return fish back to the stream of origin from a water diversion. However, the department requires an HPA for work that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state, or that will utilize any of the waters of the state to divert water under a water right.

(c) Regulating water flow from a permanent permitted irrigation structure by operating valves, or manipulating stop logs, check boards, headgates, or headboards, does not require an HPA. Any hydraulic project activity related to a change in site conditions, the manner or location of water diversion, a new landowner or contact, or new biological information, will require an HPA modification.

(d) The department must allow a person who has gravel berm dam diversion permitted by the department before January 1994 to continue to have the dam if it complies with the provisions of the HPA. However, the department can provision the approval of gravel berms.

(4) Water diversion and intake design, construction, operation, and maintenance:

(a) A diversion structure must not hinder upstream and downstream adult and juvenile fish passage. If passage problems develop, the department may require a person to modify the check or wing dam.

(b) At pump stations, screens, and headgate areas, a person may use excavation equipment or suction dredge to remove accumulated silts and gravel from within twenty feet of the point of diversion unless otherwise permitted. Place material removed so it will not reenter waters of the state. The water diversion must be open during this work to capture disturbed sediment within the irrigation diversion and prevent loss of sediment into the stream.

(c) Equip and maintain any device used for diverting water from a fish-bearing watercourse with a fish screen approved by the department to prevent passage or impingement of fish into the diversion device. Maintain the fish screen and associated structures as necessary to

achieve the approach velocity, a functional bypass, and fish protection criteria.

(d) Irrigation diversions must not create blind diversion channels leading to the fish screen. Diversions must be equipped with a fish bypass mechanism to provide opportunity for fish entrained within a delivery canal to voluntarily return to the stream.

(e) Gravity diversions.

(i) Wing and check dams.

(A) Prior to constructing a wing or check dam, contact the department for opportunity to assess the site and determine whether active spawning and incubation is occurring at the site.

(B) Maintain diversion canals to maximize hydraulic gradient in the diversion canal to minimize the need for work within the natural watercourse. Maintenance includes removing sediment and debris at the point of diversion.

(C) Unless a gravel dam is approved, temporary wing or check dams for irrigation may be constructed using a combination of jersey barriers, concrete blocks, steel posts and wood, pinned straw bales, plastic sheeting, and similar inert materials.

(D) Where gravel dams are permitted, they must be constructed with gravels available on-site waterward of the OHWL, or with clean round gravel transported to the site. Limit bed disturbance to the minimum needed to achieve the provisions of the water right.

(E) Bed excavation depth to construct an irrigation diversion must not exceed eighteen inches unless otherwise approved by the department to avoid destabilizing the stream bed.

(F) Earth or dirt must not be used to seal check or wing dams. Straw, plastic sheeting, filter fabric, and similar inert materials may be used to seal wing or check dams.

(G) Do not use logs or other woody material waterward of the OHWL to construct the dam unless approved by the department. Large wood from upland locations may be used to create a wing or check dam.

(H) If logs or other large woody material block water flow into a ditch or inhibit construction, a person may relocate them within the OHWL.

(I) Wing or check dams must be constructed in a manner that does not cause bank erosion.

(J) All foreign materials, except clean or native gravel, used to construct wing or check dams must be removed within seven days after the end of the irrigation season.

(ii) Diversion dams must not extend completely across the stream unless needed to seal the dam to achieve the water right.

(iii) Graveled wing dams must be removed or breached down to the natural bed elevation in at least two locations at the end of the irrigation season.

(f) Start-up and shut-down of water diversions.

(i) Clean and maintain the fish bypass mechanism prior to diverting water to ensure it is operational and will prevent injury or stranding of fish life.

(ii) Ensure that there is sufficient flow within the bypass mechanism to safely return fish life from the fish screen to state waters.

(iii) If at any point during water diversion there is insufficient instream flow to provide opportunity for fish life to migrate downstream, close the fish bypass until there is sufficient flow.

(iv) Slowly ramp down flows at the end of the irrigation season in a manner that prevents stranding or predation of fish life within a canal above the fish screens or within the fish bypass mechanism. Do

not close the head gate completely until fish have either left the canal and bypass or are salvaged and returned to the stream. Head gates located downstream of the fish screen may be closed immediately at the end of the irrigation season.

[Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 15-02-029 (Order 14-353), § 220-660-250, filed 12/30/14, effective 7/1/15.]