WAC 220-660-210 Channel relocation and realignment. (1) Description: The department discourages channel relocation and realignment and will approve them only when a person can demonstrate benefits or lack of adverse impact to fish life. Channel relocation may solve problems of channel encroachment and/or confinement, and foster the development of a new channel with appropriate channel morphology and healthy riparian zones. Channel relocation permanently changes the location of the channel. The new channel should be designed with bioengineered stability, rather than structural stability, so that the profile, pattern, cross-section and bed elevation can be expected to achieve long-term natural functioning. Channel realignment is used to restore a single-thread, straightened channel(s) to a more natural sinuous pattern.

(2) Fish life concerns:

(a) Channel relocation and realignment is a major undertaking involving reconstructing the channel bed, habitat features, channel banks, and flood plain. In-channel work will have a much greater impact on the bank and channel than off-channel work including the downstream burial of invertebrates, elevated suspended solids, and habitat destruction.

(b) However, channel relocation and realignment can also benefit fish life by altering channel planform, profile, and cross-section geometry to restore habitat that supports fish life. Restoration work can range from complete reconstruction of a channel to smaller-scale alterations that induce incremental changes to channel form.

(3) Channel relocation and realignment design: A channel relocation and realignment may be approved if:

(a) Permanent new channels are similar in length, width, depth, flood plain configuration, and gradient to the old channel(s); and

(b) The new channel(s) incorporates habitat components, bed materials, channel morphology, and native or other approved vegetation that provides better protection for fish life than that which previously existed in the old channel.

(4) Channel relocation and realignment construction:

(a) During construction, a person must isolate the new channel from the flowing watercourse.

(b) Before water is diverted into a permanent new channel(s), a person must install approved habitat components and bed and bank protection materials to prevent erosion as specified the approved design.

(c) When filling the old channel(s), water discharging from the fill must not adversely affect fish life.

(d) The angle of the structure used to divert the water into the new channel(s) must allow a smooth transition of water flow.

[Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 15-02-029 (Order 14-353), § 220-660-210, filed 12/30/14, effective 7/1/15.]