

Restricted Activity Period

What is a Restricted Activity Period (RAP)?

RAPs are designated times of the year where instream work should be avoided to prevent impacts to fish during sensitive life stages such as migration, spawning, egg incubation and fry emergence.

Why do RAPs need to be avoided?

Instream activities can result in increased levels of suspended sediments, which is a deleterious substance. When sediments are released during the RAP, the risk to fish increases due to the event happening at the same time critical and sensitive activities and life stages of fish are occurring.

Population and local level concerns over sediment increases in the RAP include the blanketing of spawning gravels, the suffocation of eggs and the alteration/impeding of fry development. In addition, sediment causes gill abrasion and results in stress to fish, as well as infilling of other sensitive habitats, such as rearing and over-wintering areas. This has the potential for temporary or even permanent migration out of an area if conditions remain unsuitable.

Water quality guidelines, including thresholds and discussions on sedimentation and turbidity and their effects on aquatic life, are available from the Government of Alberta (Environmental Quality Guidelines for Alberta Surface Waters) and the Canadian Council of Ministers of the Environment (CCME) (Water Quality Guidelines for the Protection of Aquatic Life: Total Particulate Matter).

- [Surface Water Quality Guidelines and Objectives](#)
- [Water Quality Guidelines for the Protection of Aquatic Life: Total Particulate Matter](#)

In addition to sediment concerns, works that are proposed directly adjacent to or over top habitat that is considered to have high quality potential, can directly impact migratory routes, spawning gravels and rearing areas through river bed disturbance and a permanent or temporary project footprint. This could result in avoidance of fish movement and activities within these areas.

Avoidance of instream work during sensitive time periods can prevent or reduce these adverse impacts; therefore, works within the RAP should be avoided when and wherever possible.

How can I avoid working in a RAP?

The timing and duration of instream activities is critical to reducing the stress caused by works on the aquatic environment. Prior to submission of a *Water Act* Approval application, review the appropriate Codes of Practice: Management Area Maps that specify RAP location and timing for individual water bodies. Applicants should schedule their work, particularly any instream components, to take place within an 'open construction window' where work can be completed outside of a RAP. In addition, works should be planned such that the amount of time spent instream is minimized as much as possible. The applicant should be able to confirm to Environment and Parks (AEP) that the proposed work can, and will reasonably be, completed within an open window and that instream works have been reduced to what is feasible.

- [Management Area Maps](#)

What happens if I can't avoid working in a RAP?

Work within a RAP is not considered routine and represents one of the highest risks to the aquatic environment and associated fish populations. As a result, the application requirements to work within this time period are among the most stringent. Work within a RAP typically will only be considered if compelling rationale, sufficient assessment information, and detailed plans and mitigation are submitted that adequately address this heightened risk.

Supporting documents for *Water Act* Approval applications and amendments to work within a RAP must be prepared by a Qualified Aquatic Environmental Specialist (QAES) and include:

- Clearly outlined proposed timing and duration of instream construction activities. It should be shown, where feasible, that the timing and duration of instream activities during the RAP was minimized and planned such that the least amount of impact on the aquatic environment occurred.
- A habitat map of the project area and zone of impact, complete with substrate composition and habitat unit type (riffles, pools, etc.). Substrate mapping can inform on the presence of fish and the likelihood of habitat use by various life stages of species occurring within the project area. In addition, mapping can further assist the proponent in identifying appropriate mitigation and/or determining the amount of offset required in the event that a disturbance happens unexpectedly and cannot be avoided.
- A plan with clear methods to determine presence and use of habitat by various life stages of fish (migration, spawning, egg incubation, fry emergence, etc.) within the project area and zone of impact. This plan should also outline the proposed responses by the onsite QAES should these activities be encountered (i.e. notification to the department, halt work, etc.). Assessment of presence and use of habitat by various life stages of fish should be investigated via applicable and scientifically approved methods.

Note: Redd surveys alone are not sufficient in determining the presence of all fall spawning salmonid species (e.g. Mountain Whitefish do not build redds).

- Additional mitigation measures proposed, during instream activities, to reduce the impacts on known or presumed sensitive habitats within the work site and zone of impact (e.g. reduction of the instream footprint, minimizing the duration of instream work, adequate erosion and sediment control measures, careful placement of instream structures, instream excavation prohibited, equipment prohibited from entering the water, deferral of works should spawning be identified in and around the worksite or zone of impact, etc.)
- A detailed turbidity monitoring program, including a description of how the Environmental Quality Guidelines for Alberta Surface Waters and/or the CCME guidelines will be applied, and will support the evaluation of potential harm to fish and fish habitat. Turbidity monitoring results should be maintained for review if requested.

Clearly outlining how working in the RAP has been mitigated for through monitoring plans, proposed mitigation and rationale, should lead to fewer questions and concerns on the application.

Note: In some circumstances, it may be required to leave isolation structures in-place during a RAP in order to avoid unnecessary sedimentation and bed disturbances, even if all other proposed works have been completed. In these cases, the isolation works should be installed and removed during the open windows, and be designed and constructed to remain in place and be effective throughout the RAP. This scenario is not ideal and all efforts should be made to ensure works are completed outside of the RAP and within the 'open construction window'.

How do I request an amendment to work in a RAP on an existing *Water Act* Approval?

Current approval holders who anticipate having to work into a RAP are asked to submit the same information as indicated above, to AEP, citing their current approval number. Amendment applications should be submitted well in advance of proposed commencement of any activities inside a RAP to allow the time to review the supplied information and consideration of proposed works.

The time required for the referral and review of amendment applications may result in construction delays or work stoppages if the information is not provided in a timely manner, is inadequate, or cannot be justified by a compelling rationale. Also, the terms and conditions of existing authorizations should be reviewed as they may already specify provisions to request work within a RAP. These provisions include a similar time requirement for the submission of plans.

Note: Approval holders must comply with the terms and conditions of AEP Approvals. Correspondingly, any prohibition stated in the terms and conditions of an approval for work within a RAP must be complied with unless otherwise authorized or amended in writing by the department.

Contact Information

Questions regarding the RAP and aquatic habitat can be sent to:

- [Fisheries & Wildlife Management Area Contacts](#)

For information regarding Approvals, or to contact us, please call our Calgary office at **403 297-7605**, or our Lethbridge office at **403 381-5322**.