

## Declining Lake Fisheries

### What is the Issue?

Summer Village residents often voice concerns to councilors about the reduction in the number of fish in their lake.

They may remember a time when fish were plentiful and there were large limits for fish you could catch and take home.

Now, many Alberta lakes are open for catch and release fishing only.

Both loss of habitat and over-fishing have contributed to the decline of the numbers of fish in Alberta.

Good lake stewardship practices such as retaining natural shorelines and restricting or prohibiting the use of fertilizers are important steps to keeping the ecosystem of the lake in a balanced, healthy state and, therefore, a good environment for the fish and wildlife living there.

### Angling Pressure

Fish populations are commonly affected by angling pressures and mortality from improper handling.

Alberta has a growing population base, but a relatively small number of fish bearing waters.

Notwithstanding its growing population, Alberta already has the highest number of anglers per lake ratio in Canada.

The Province has limited the fishing at many lakes to “catch and release” only. This can be effective, but anglers need to be careful when handling fish

so as not to damage them, which could contribute to their mortality rate.

For example, limit the amount of time a fish is out of the water, and use soft, wet gloves when handling fish.

To help protect our lake fisheries it is important that all Albertans follow fishing regulations.

### Land Use Practices

Many residents are not aware of the kinds of activities that can have an affect on fish populations.

Altering shorelines by removing vegetation and creating sand beaches can reduce the amount and quality of fish spawning and rearing habitat.

Contamination from over fertilizing, runoff from septic fields, storm water runoff, and road salts can ultimately reduce water quality and result in fish kills.

For example, excess nutrients from fertilizers and septic fields can cause algal blooms in the lake.

When the algae die, microorganisms break down their organic material – a process that requires oxygen.

If enough dissolved oxygen is removed from the water a deficit of dissolved oxygen can result, causing aquatic organisms to suffocate. This causes what is referred to as a “summerkill” of fish.

### Laws Governing Fish Harvesting

The Fisheries Act (Alberta) provides regulations governing declining fisheries, the number of fish that can be kept, and where anglers can fish.

The Alberta Guide to Sportfishing

Regulations is published annually. Anglers are responsible for understanding and following the regulations.

Fines and penalties can be issued for violations.

The Report A Poacher program also provides opportunities for reporting illegal harvesting of fish and violations under the Fisheries Act (Alberta).

### Laws Protecting Fish Habitat

The deposit of harmful, or deleterious material of any type (e.g., contaminated water, excess silt loading from earth or sand, etc.), into water, or in a place where it may enter water frequented by fish, is contrary to the EPEA and to the federal Fisheries Act.

Any destruction of fish habitat, such as the unlawful removal of aquatic vegetation that is considered to be fish habitat, is also in violation of the federal Fisheries Act.

Provincially, the Public Lands Division of Alberta Sustainable Resource Development enforces infractions that have to do with removing aquatic vegetation without a permit.

Fines and penalties can be issued for violations of the Acts.

### What Should I Do?

Refer anglers to the Alberta Guide to Sportfishing Regulations, which provides information on the number and size of fish that anglers may keep, and closures for lake fisheries.

It is the responsibility of anglers to know how to carefully retrieve, handle, and release fish.

Techniques include: landing fish quickly, releasing fish immediately, keeping the fish in the water while releasing them, and careful handling to avoid squeezing.

Hooks should be carefully removed and wire cutters should be used to cut the hook instead of the line.

Survival is also increased when fish are revived by holding them in the water before they are released.

**Anglers and other Albertans should report poachers by calling the Report-A-Poacher phone line at 1-800-642-3800.**

Help Protect Fish Habitat

Summer Village Councilors can become more familiar with how land use practices can affect fish populations in the lake.

They can explore ways to raise awareness and educate residents on the harmful effects of runoff from septic systems and over-fertilizing.

These human impacts can lead to excess nutrients in the lake that may result in fish kills.

Consider creating or reviewing bylaws to ensure land use practices within the Summer Village are managed to help maintain healthy lake fisheries.

For example, Council could create and enforce bylaws governing the activities and uses that occur in any environmental reserves within its boundaries.

A bylaw preventing the removal of the shoreline vegetation from these reserves would be of great

benefit to both water quality and fish habitat.

A bylaw banning or restricting the use of fertilizers in the Summer Village would also help preserve fish habitat and water quality.

#### Taking a Leadership Role

Summer Village councils have opportunities to work with their residents, Sustainable Resource Development, the Alberta Conservation Association, and other non-government agencies to develop policies and bylaws to protect the lake ecosystem.

Summer Village councils can initiate and encourage lake stewardship programs and volunteer lake monitoring activities to protect the aquatic environment and lake fisheries.

Partnerships with Alberta Sustainable Resource Development and the Department of Fisheries and Oceans can help to protect and enhance fish habitat, support the posting and enforcement of closures, and protect fish species at risk.

Industrial sectors such as agriculture, forestry, and oil and gas have obligations and responsibilities to protect aquatic environments, and they should be asked to participate in lake stewardship programs.

#### Who Can I Contact?

For information on lake fisheries and fishing regulations see the Alberta Sustainable Resource Development web-site at: <http://www3.gov.ab.ca/srd/fw/fishing/index.html>, contact your local Fish and Wildlife Division office, or call the Edmonton office at 780-427-4407. Dial 310-0000 first to call toll free.

For information on fish habitat and the rules and regulations surrounding the removal of

aquatic vegetation at the lake, contact:

- The regional office of Alberta Environment.
- The regional office of Alberta Public Lands and Forests Division.
- The regional office of the federal Department of Fisheries and Oceans.

To report suspected resource violations, contact your local office of the Fish and Wildlife Division or Report A Poacher at 1-800-642-3800, or #3800 on the TELUS Mobility cellular network (courtesy of TELUS Mobility).