



**Ducks Unlimited Canada**  
Conserving Canada's Wetlands

Active by nature.

October 23, 2009

Mayor Marty Bootsma, Councilors and Staff  
City of Salmon Arm  
PO Box 4  
Salmon Arm, BC V1E 4N2

Dear Mayor Bootsma, Councilors and Staff:

Ducks Unlimited Canada (DUC) is interested in the health of Shuswap Lake and the waterfowl and wildlife habitats the watershed supports. Subsequently we respectfully submit this letter in response to the detailed Riparian Areas Regulation (RAR) report for Assessment number 1310, for PID's 011-167-211; 011-167-271; 007-329-113, known as the Smartcentres' site, on the floodplain of the Salmon River, in Salmon Arm.

City council is asked to read the 1993 Salmon Arm Wetlands article (attached below). There are several environmental messages in the news story, and it will inspire you to protect this unique floodplain. A long term vision for a healthy and diverse environment in the Shuswap will require you to take action, and your decisions will leave a lasting legacy to be highly coveted by future generations.

DUC believes RAR is ineffective, if it is not capable of protecting the floodplain of the Salmon River, where significant public dollars and time have been spent to improve habitats and the fisheries resources for nearly twenty years. Incremental changes combined with this extensive development proposal would effectively eliminate the ability of this site to function as floodplain.

Given the intent of the regulations and the Official Community Plan, it is surprising the proponent has submitted such an extensive proposal for this site. It is particularly alarming because the site provides valuable functions for water quality in the Shuswap; a lake with a recent and unprecedented algae bloom.

The Qualified Environmental Professional's report for this site has been "accepted". Nevertheless, DUC anticipates large impacts to fish, waterfowl and wildlife habitat associated with the river, the floodplain, and the shallow waters of Salmon Arm Bay. This is an ecologically valuable floodplain, as cited in the discussion paper titled,

Habitat Conservation Strategy for Salmon Arm Bay, by Future Legacy Consulting Group & Bufo Incorporated in association with Ophiuchus Consulting, as follows:

*Over 230 species of birds have been observed from the foreshore area; an avifauna dominated by water birds and shorebirds reflecting the great value of the area for these groups. Western grebe nesting and migratory feeding by shorebirds and waterfowl are the most significant activities from an avian perspective. The bay (and floodplain) is also critical rearing habitat for several Salmonid species as well as other fish species and animals that feed on them. The foreshore of Salmon Arm Bay (immediately downstream of the development site), resembles a marine intertidal zone in that it demonstrates bands of vegetative and habitats that parallel the shoreline. Ecosystems include mudflats, shallow water, cattail –bulrush, reed canarygrass, aspen-snowberry (mature & young), white willow - maple, and cottonwood-dogwood associations.*

*The floodplain and Salmon Arm Bay provides critical rearing habitat for three species of Salmonid, which spawn in the area (sockeye, chinook, coho), as well as feeding habitat for fish and birds, and food sources for fish-eating birds such as mergansers, (red listed) Western Grebes, and (blue listed) Great Blue Herons.*

*Nesting habitat for a western grebe colony that has been nesting here since it was first recorded in 1962. This is one of only three known nesting sites in British Columbia and therefore is of provincial significance. Other grebe species are also known to nest here. Because of its low breeding numbers in British Columbia and the threats to its nesting colonies, the Western Grebe has been assigned to the provincial Red List of species being considered for legal designation as Endangered or Threatened.*

*The area provides important staging sites for migrating waterfowl. In concert with Okanagan sites, Salmon Arm plays an important role in linking northern breeding and southern wintering habitats for migrating ducks and geese. It is also a breeding area for some waterfowl and wintering area for others in mild years.*

*The actions of the Salmon River play a critical role in the ecology of the bay. Deposition of soil and other organic materials have created and sustained the mudflats, and support the hydrophytic vegetation which makes the bay highly productive for invertebrates, fish, and birds. While the stream channels and mudflats dominate the area, soil deposition have created areas occupied by willow thickets or reed canarygrass, and in upland areas on either side of the river, old or mature cottonwood-dogwood ecosystems. The maintenance of a healthy Salmon River is critical to the bay ecosystems.*

*Native land properties contain some unique areas around the bay including some of the most natural ecosystems such as: substantial cottonwood-aspen forests, sedge marshes, moist pastures, willow thickets, and the interface of shallow water, stream channels and mudflats at the mouth of the Salmon River. The cottonwood ecosystem is Red Listed and supports a diversity of valuable species including the Red Listed Western Screech owl and nesting habitat for Wood Ducks.*



Ducks Unlimited Canada has operated a very successful wetland and foreshore restoration project on Neskonlith Indian Band lands since 1993. The natural biodiversity is impressive in this area where lake, river, wetland, floodplain and forest habitats all meet. The area is considered to be of provincial and possibly national significance because it supports the largest concentration of migrating shorebirds in the southern interior.

The developer's proposed tree removal, construction and paving, etc. will of course impact the site directly, and ecosystem values will disappear. Additionally, the three meter earthen barrier on the east side of the river to protect the shopping center will result in a loss of floodplain function. DUC is concerned there has been insufficient consideration of the subsequent incremental effects on floodplain hydrological functions and how these may impact vegetation, habitats and water quality.

The City has an obligation to administer this site very carefully due to its proximity to Shuswap Lake and the mouth of one of the most restored rivers in BC. The healthy and natural connectivity to the existing DUC project and to restoration works within the ±200km Salmon River Watershed Roundtable area cannot be regained once it's gone. To ignore the relationship between the development, the river, the lake, the wetlands, and the diversity of associated species would be a tragedy. It is of considerable concern given our knowledge today, the intent of the provincial regulations, and the power clearly given to local jurisdictions to protect sensitive areas.

DUC urges staff and council to be pro-active, and to apply the legislation and local bylaws and zoning to the fullest extent possible, to ensure the habitats and functions associated with the floodplain and delta of the Salmon River are retained and enhanced. Specifically we urge council to apply more substantial measures to protect the environmental functions and features of this site and floodplain.

Like Mary Thomas, it is our focus to look for solutions. DUC encourages city council to direct the energy of the developer and the community towards a solution to protect the environment. A significantly reduced building footprint or development at an alternate location for this extensive proposal will secure a healthy environment; and in the long term will leave a legacy that supports business investment, the community, the lake, waterfowl, wildlife, and the public.

Sincerely,

(Original signed)

Kingsley Campbell P Ag  
Head of BC Agriculture Programs  
Ducks Unlimited Canada



## **WETLANDS ENHANCEMENT PROJECT – A MODEL FOR ENVIRONMENTAL COOPERATION**

By Lyse C. Cantin  
Coop Student, Environment Canada

“It’s because of the eyes” Mary told me. “When I saw the seagulls peck their eyes out, it made me cry.”

Mary’s tears fell for the thousands of salmon stranded at the mouth of the Salmon River- stranded because dredging changed the mouth of the river, not once, but twice. As the salmon became lost migrating into shallow dead-end channels, they became easy pickings for the opportunist gulls.

But Mary Thomas of the Neskonlith band did more than just cry.

“When the townspeople changed the course of the river, I lost half my meadow,” said Mary. “But the fish and the birds lost more. They lost the food, the resting places and the homes that they have been using for thousands of years. I had to do something.”

You see, Mary owns the land on Shuswap Lake at the mouth of the river. Over the years, dredging and overgrazing by cattle have dramatically altered the nature of the wetlands located here. In fact, they almost disappeared. And, as the wetlands receded, salmon and wildlife populations diminished, some to dangerously low levels.

Spearheaded by Mary, “cooperation” became the flavor of the day. She petitioned politicians, environmental groups, Neskonlith and Adams Lake band members, even provincial and federal government officials, until she got results.

Thanks to the combined efforts of Environment Canada, the Ministry of the Environment, Lands and Parks, both native bands, Ducks Unlimited, several other partners (and Mary, of course) the Salmon Arm Indian Lands Project has been heralded a tremendous success.

The project took three years of planning and on-site work to complete. The Canadian Wildlife Service, through the Fraser River Action Plan, contributed funding towards protecting the remaining marsh and estuary. Two dikes, a juvenile fish exclusion screen, nest boxes, and several loafing logs are only a few of the improvements that have been made to enhance the wetland habitat.

“The most important thing we had to do on this site was to manage the cattle,” said Rick McKelvey, Head of Waterfowl and Habitat Management for the Canadian Wildlife Service. “We put up almost three kilometers of smooth-wire fencing to keep the cattle from grazing down the cottonwood saplings and the various marsh grasses and bulrushes that grow there.”

“In fact, when we did a walkabout recently, we were excited to see that the cottonwood saplings are already more than two meters high – and that in one year.”



Ian Barnett, District Manager for Ducks Unlimited in Kamloops agrees with Rick McKelvey that cattails and bulrushes are an important component of the project. “Western grebes use this area. It is one of only two remaining areas in British Columbia where western grebes breed and raise young. The grebes anchor their nests to the reed canary grass. If we lose this wetland we may well lose one of the last two genepools of western grebes. We can’t afford that.”

The District of Salmon Arm recognizes the high natural value of Salmon Arm Bay and has adopted the western grebe as its official bird. Salmon Arm officials hope that protected wetlands will increase grebe numbers. A spin-off benefit will be that bird and wildlife viewers visiting the wetlands will bring tourism dollars to the region.

But the wetlands do more than bring in tourism revenue and protect the western grebe. They also protect people. “Wetlands help prevent flooding and erosion. They alleviate droughts and help recharge water tables,” said Gail Moyle with the Fraser River Action Plan. “They also act like environmental kidneys in that they can filter pollutants and toxic contaminants. That’s why it is so important to protect them.”

And that is exactly what Mary Thomas set out to do – and, indeed, has accomplished. She wants the wetlands to go back to what they were like when she was young. “I used to go down there and the trees were everywhere. Now there are only a few patches. If there is one thing I want to do, it is to save what is left. Protecting something this important is not a racial thing. If enough people get together as “people” we can go far together. THAT is the message I give.”

I guess enough people have heard, and acted on, Mary’s message.

The story of the wetlands enhancement project at the mouth of the Salmon River is the stuff to make environmentalists jump with joy. It stands as a triumphant milestone in the battle to preserve what is left of nature. It also gives tribute to a lady with a simple idea and an overwhelming sense of responsibility – a lady who would not take “no” for an answer.

*For information on other Fraser River Action Plan initiatives in the Salmon Arm area, please call: (604) 666-5900.*

