

BUFFALO LAKE Management Team

PARLBY CREEK - BUFFALO LAKE WATER MANAGEMENT PROJECT

• NEWSLETTER • JUNE • 1996 •

Message From the Chairman

Since our last report of January 1996, the Management Team has been busy with the preparation of a Mitigation Report. This Mitigation Report was specifically identified as a responsibility of the Team in the 1991 summary of the Parly Creek - Buffalo Lake Water Management Project Review Board.

The Review Board in its conclusions endorsed this project noting positive multiple use objectives including stable water supplies for Alix and Mirror Lakes, fish and wildlife enhancement, agricultural flood control, improvements to water based recreation and significant regional benefits. While the overall impact of this project will be positive there will be changes to the status quo — some of these changes will require mitigating measures.

We take this opportunity to invite you, on behalf of the Buffalo Lake Management Team, to attend our open houses at Rochon Sands and Pelican Point this July. At these sessions we will present information describing the status of

the project to date. Most importantly however, we are asking for your opinions and advice on the issues we feel need attention prior to Buffalo Lake reaching its full operational level under stabilization. As it is projected that this level will not be reached until after three or four years of pumping, there is adequate time to

prepare for any foreseeable problems. In general, some of these issues include the effects of higher water levels on lake and groundwater quality agricultural activity, wildlife habitats, marinas, facilities and campgrounds.

We will provide questionnaires to record your views - Team members and technical

personnel will be present to discuss any concerns.

Please come out and see us on July 20 in Rochon Sands and July 21 in Pelican Point.

Sincerely,

Angus Braseth, Chairman
BUFFALO LAKE MANAGEMENT TEAM

Public Open Houses

Summer Village of Rochon Sands:

Saturday, July 20, 1996

11:00 am - 4:00 pm

**LOCATION: TENT NEAR THE
MARINA**

Pelican Point

Sunday, July 21, 1996

11:00 am - 4:00 pm

**LOCATION: TENT NEAR THE
MARINA**

Mitigation Report

Major Agricultural Issues

Concerns

Potential reduction in the quality and quantity of hay production in the Carlyle, Spotted Lake and Mirror Backfloods if backfloods are operated at higher elevations and for longer durations.

Potential for future agricultural versus recreational use conflicts use around Buffalo Lake.

Stabilization of Buffalo Lake at higher than recent levels will reduce the area that can be utilized for hay production and pasture.

Concerns that traditional access to Buffalo Lake water for stock watering will be compromised.

Possible Solutions

Satisfactory agricultural production in the backflood areas will be contingent on the agricultural community maintaining an effective and influential voice on the Spotted Lake Advisory Committee.

Mitigation of the reduction in agricultural lands along the shoreline of Buffalo Lake is deemed satisfactory where the Crown has completed an agreement to purchase the shoreline lands from the adjacent owner. The adjacent owner should have first right of refusal to lease back the acquisition lands under grazing permit or grazing lease. Access to the lake water for stock watering should be maintained.

Future conflicts between agricultural use and recreational use are probably inevitable. The Counties of Camrose, Lacombe, and Stettler should be supported in their initiative to update the 1977 Buffalo Lake Management Plan.

Major Facilities Issues

Concerns

A number of public use facilities at Rochon Sands Provincial Park will be adversely affected by higher water levels.

A number of cottages may be subject to wind driven wave run up at the Summer Village of Rochon Sands and at Pelican Point.

Boat launches and marinas will be adversely affected at the Summer Village of Rochon Sands, the Summer Village of White Sands and at Pelican Point.

A significant area of the public use campground at Pelican Point Park will be saturated and/or submerged at higher lake levels.

Possible Solutions

Where impacts are noted for facilities on private lakeshore lands the Crown shoreline land purchase shall be considered as complete mitigation.

Where significant impacts are predicted to public use facilities, direct mitigation is generally recommended. The mitigation will involve the retrofitting or reconstruction of facilities to function at the new stabilized levels of Buffalo Lake. Major potential works include:

- *Retrofitting of day use and camping facilities at Rochon Sands Provincial Park to function adequately at higher lake levels.*
- *Reconstruction of marina related facilities at Pelican Point and the Summer Village of Rochon Sands.*
- *Reconstruction of the Pelican Point Campground.*
- *Reconstruction of boat launches at Pelican Point and the Summer Villages of White Sands and Rochon Sands.*
- *The construction of modest shorefront works to provide protection to at least the 1:100 year flood level for low lying residences at Pelican Point and the Summer Village of Rochon Sands.*

Major Water Related Issues

Concerns

Potential groundwater, lake water and drinking water contamination from residential sewage systems at Buffalo Lake.

Alterations in water quality and aquatic plant regime in the diversion system, Alix Lake and Buffalo Lake.

Possible Solutions

A testing and program is currently being implemented to determine the extent of possible existing contamination to groundwater, lake water, and water wells from sewage systems at the Summer Village of Rochon Sands and Pelican Point. While contamination may presently exist, conditions could be exacerbated due to higher groundwater levels after lake stabilization.

The 1991 Environmental Impact Assessment concluded that most water quality issues identified at that time were not deemed to be significant. The EIA did, however, recommend that a project wide water quality monitoring program be developed to determine post stabilization impacts. A post - stabilization program has been designed to monitor water quality and aquatic plant growth.

Major Fish and Wildlife Issues

Concerns

The need for the development of water management plans for the Parly Creek system including the Mirror, Spotted lake and Carlyle backfloods.

The maintenance of natural water level fluctuations in Buffalo Lake.

The protection of endangered Piping Plover habitat and several important colonial nesting islands on Buffalo Lake.

The need to protect Bashaw Bay and Parly Bay as significant wildlife habitats.

Possible Solutions

Several conservation initiatives have already commenced. For example, the Wildlife Wetland Conservation Area has been established near the Parly Creek Channel, and a habitat management project is being developed for Rockeling/Ryder.

Fish and wildlife concerns should continue to be represented on the Spotted Lake Advisory Committee to ensure wildlife habitat opportunities are maximized in the backflood areas.

It is noted that fluctuations will occur under the Operations Plan for Buffalo Lake. It is advised that periodic drawdowns to 780.55 be implemented to ensure plant diversity.

It is recommended that Parly Bay and Bashaw Bay be designated as non-motorized boating areas.

Proposed Operations Summary

Parly Creek

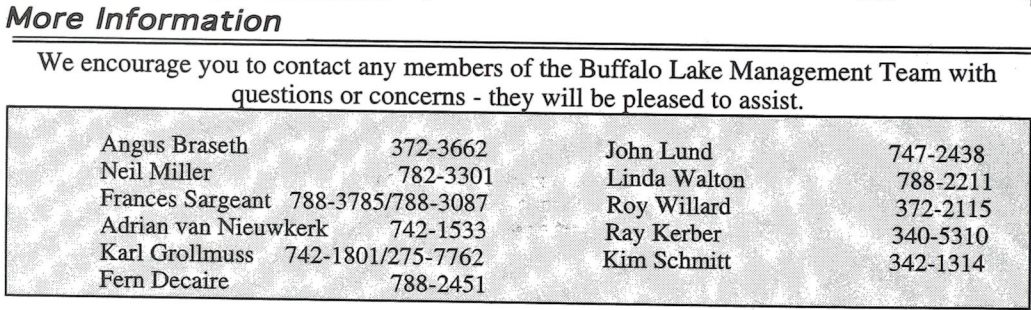
Operations advice on the Parly Creek channelization is provided by the Spotted Lake Advisory Committee. This committee has been in operation since 1987 and is made up of representatives from the Public, Alberta Forestry, Lands and Wildlife, Alberta Agriculture and Alberta Environmental Protection.

Buffalo Lake

Pumping is required for an estimated 3 to 4 year period to bring the lake from the present elevation of 780.16 to 780.85 metres. After the lake has reached the optimum level of 780.85 metres, pumping from the Red Deer River would be restricted to May 1 to October 31 on an as-needed basis. Long term pumping would be modeled as follows:

SCENARIO	LAKE ELEVATION (m)	
	START OF PUMPING	END OF PUMPING
1	780.55	780.85
2	780.65	780.85

Project Map



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