

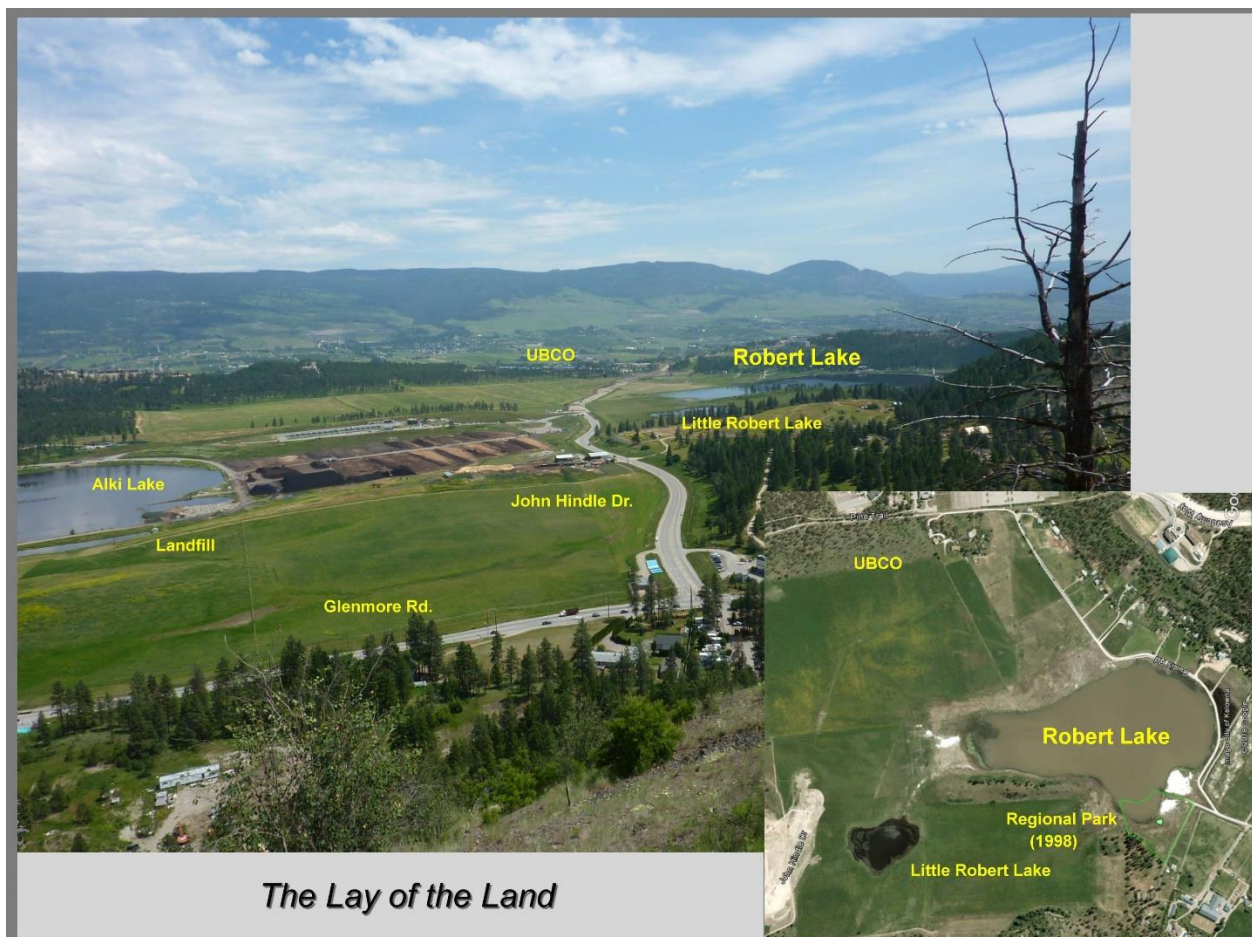
Celebrating Eighty-Five Years of Birding
at
Robert Lake
Kelowna, BC



A Status Report
Conservation Committee
Central Okanagan Naturalists' Club
Prepared by: Roland G. Gebauer
October 25, 2018

CONTENTS

Preamble	4
Summary	4
1 Introduction	5
2 Some Historical Background	6
2.1 The Beginnings	6
2.2 The Kelowna Natural Features Inventory – 1991	6
2.3 The Environmental Assessment of Robert Lake – 1993	7
2.4 Robert Lake Regional Park – 1998	7
2.5 Wetland Habitat Management Strategy – 1998	8
2.6 Sensitive Ecosystem Inventory: Kelowna – 2007	8
2.7 Wetland Inventory, Classification, Evaluation and Mapping (WIM) – 2009	8
2.8 Robert Lake Conservation Covenants – 2010	9
3 Recent Activity	10
3.1 Ecological Analysis to Support UBC’s Campus Master Plan – 2014	10
3.2 The John Hindle Drive Extension – 2016	10
3.3 John Hindle Drive Public Information Session	11
3.4 Environmental Assessment of Robert Lake – 2016	12
3.5 UBC Access Fight – 2016	12
3.6 Viewing Platform at Robert Lake Regional Park	13
3.7 The Avocets of Alki and Robert Lakes – Concerns	13
4 Recommendations	14
5 Sources	15



Preamble

This status report is not intended to be exhaustive. It is based on a file of casual notes passed on to me by Les Gyug, as well as material accumulated over recent years of my involvement with Robert Lake in connection with the Conservation Committee of the Central Okanagan Naturalists' Club (CONC). In view of the ongoing concerns, it seemed prudent to collect relevant material in one document, in order to make it available to those carrying on the work in the future. A digital archive will be attached to this report.

Many CONC members have been involved with the conservation and enhancement of this unique area. No attempt has been made to list the names of these pioneers, except where they appear as part of the documentation.

Summary

Before Alki Lake, a.k.a. Schleppe's Slough, was transformed into the Kelowna's landfill in the 1960s, Robert Lake was a meadow, most of which was part of the Tutt Ranch. Once irrigation of the hayfields commenced, water began to pool in the valley bottom. City road right-of-ways and adjacent landowner properties shown on the maps, are now submerged under many inches of water. Today, water remains in the lake throughout the year although evaporation may reduce its size, exposing alkaline mudflats. Robert Lake and the adjacent landfill have become one of the prime Okanagan birding spots.

One unique bird species attracted by the alkaline nature of Alki and Robert lakes, is the American Avocet. Perhaps this beautiful and rare bird, more than any of the other species frequenting the lakes, has evoked strenuous conservation efforts over the years. In the early 90s, Robert Lake was included in the *Natural Features Inventory* as an environmentally sensitive area (ESA). Since then, many studies have confirmed the environmental and social value of Robert Lake.

Burgeoning development in the 90s resulted in a first environmental assessment of the area in 1993. The City of Kelowna acquired the Tutt Ranch in 2006, and in 2010 sold a substantial portion of it to the University of British Columbia. As part of that exchange, the University agreed to place restrictive environmental covenants around parts of Robert Lake and all of Little Robert Lake.

With the ongoing expansion of the landfill, avocet nesting sites at Alki Lake were threatened. In response, the City engaged Ecoscape Environmental Consultants Ltd. in 2016 to investigate means of mitigation. Their report, though completed in 2017, has yet to be released to the public. The impending expansion of John Hindle drive precipitated another environmental study, completed in the fall of 2016. Again, this study has not been made available to the public at the date of writing. The road, complete with an adjacent bike path, was opened in the fall of 2018. It provides direct access from Glenmore Road to UBCO.

Several areas of concern remain--the fate of the avocets, the impact of runoff from the landfill into Robert Lake, the severe flooding of recent years which limits public access to the Regional District viewing area, the construction of a viewing platform and an associated parking area, and last but not least, environmental protection of the eastern shoreline of Robert Lake.

1 Introduction

The year 2018 was declared the “Year of the Bird” by National Geographic, the National Audubon Society, the Cornell Lab of Ornithology and BirdLife International. The National Geographic website states:

In 2018, we mark the centennial of the Migratory Bird Treaty Act, the most powerful and important bird-protection law ever passed. In honor of this milestone, nature lovers around the world are joining forces to celebrate the “Year of the Bird” and commit to protecting birds today and for the next hundred years.¹

In view of this fact, it seemed appropriate to compile the present Status Report, and to recognize the 85th year of birding at Robert Lake, as well as the 25th anniversary of the first formal Environmental Assessment of the Robert Lake area. Robin Yellowlees, an early member of the Central Okanagan Naturalists’ Club (CONC), introduced his 1990 bird list for Robert Lake with the following historical note:

*This body of water was previously known as MacKay’s Lake. In “Occasional Papers of the British Columbia Provincial Museum, Number 3, The Grebes, Studies of Waterfowl in British Columbia” by J.A. Munro, issued December 31st, 1941, I quote from the chapter on Eared Grebes: “MacKay’s Lake. This slough of approximately 40 acres is adjacent to Munson Lake (now the Kelowna City dump) and resembles it in general character. Two Eared Grebes were seen there May 9, 1933; in 1938, eight or nine pairs nested on weed beds in open water then about 18 inches deep.” (Personal letter, A.C. Mackie) I accompanied Mr. Mackie on the latter visit, with Harry Gervers and Richard Trethewey.*²



Figure 1: Eared Grebe
Podiceps nigricollis (Wikipedia)

MacKay’s Lake was renamed Robert Lake at some later date, using the Okanagan pioneer’s first name. The name Munson Pond passed into oblivion when it was given the more natural name Alki Lake, sometimes also referred to as Schleppe’s Slough.³ What’s in a name? A lake by any other name is still a lake to the birds which make it their home. Robin listed 96 species of birds. New bird sightings were added over the years. The following entry from *Tracks, Trails and Naturalists’ Tales* (CONC 2001) documents a significant increase. “Robert Lake is one of the best birding locations in Kelowna ... Gwynneth Wilson and Chris Charlesworth check the lake almost daily and have found some very good birds over the years. The list of species at Robert Lake has grown to over 160 now.”⁴

Bird records for the Robert Lake area made a quantum leap with the introduction of eBird in 2002. Gyug and Weir excavated an average of 235.7 checklists from eBird records between 2013—2015 (Gyug and Weir 2017).⁵ The signature bird of the Robert Lake area is definitely the stunning American Avocet (*Recurvirostra americana*). With its colourful mating plumage and graceful movement, the avocet is a birder’s delight. Local nesting records go back to 1987 (Cannings *et. al.* 1987),⁶ when two nests were reported at Alki Lake, with a high of 27 nests in 2000 (Gyug and Weir 2017).



Figure 2: American Avocet
Recurvirostra americana

2 Some Historical Background

2.1 The Beginnings

Hugh Westheuser, who has been a member of the CONC Conservation Committee, as well as a Director with the Central Okanagan Land Trust (COLT) for 25 years, relates “a bit of history on this controversial piece of property.”

Up until the City of Kelowna purchased the nearby land as a garbage dump [Robert Lake] was basically dry, with only the rare bit of water running into it, usually after a very snowy winter and it soon evaporated. You will find a road right-of-way crossing the middle of it, and all the property along the east side has a wedge shaped piece of land meeting in the centre of the pond.

As the garbage dump filled, it started to push water into the slough and interestingly, the first Ring-billed Gulls showed up in the Okanagan. They are now the most common gull species and nest on an island in Okanagan Lake near Lake Country. Water now stays in the pond all year around. It has become known as Robert Lake, and is well known to birders as it attracts a host of unusual species, and is one of two locations in the Province where American Avocets nest. It is advertised by the Chamber of Commerce as an Okanagan birders site.

One spring, a number of years ago, the pond overflowed its banks, flooding out the roadway along the east side. People were unable to drive to their homes. The owners got up in arms and demanded the City do something about it. It became an unpleasant disagreement, resulting in basically a stalemate between the two factions – the neighbor and the City. I think this is still a contentious issue.⁷

2.2 The Kelowna Natural Features Inventory -- 1991

The 90s were a period of rapid growth for Kelowna. Unproductive land was taken out of the Agricultural Land Reserve and carpeted over with asphalt and residential housing. The need for conservation of natural areas became pressing. Fortunately, concerned citizens raised the issue with City Council. Several projects were initiated and shepherded through the adoption process by that indomitable champion of the environment, Alderman Robert Hobson.

The *Kelowna Natural Features Inventory Summary Report* of December 1991 (NFI), prepared by Reid, Collins and Associates for the City, opens with the following remarks:

Recognizing the value and importance of its natural qualities, the City of Kelowna on June 1991, invited proposals for the preparation of an inventory, assessment and management strategy of the significant natural features within the City. The purpose of the initiative was to provide an information base for future planning where urban development could potentially impact on those natural qualities. In addition, the initiative was to provide for policies which would enhance the protection of major natural attributes while not impeding overall community growth. ... Growing awareness of the significance of natural areas and natural features, has led to increasing focus of attention within the rapidly growing City of Kelowna. In early 1991, a “Natural Features Committee” of interested community residents was formed and a procedure was initiated to identify significant natural features within the City.⁸

Fifty-six areas were identified by the NFI, and assigned significant environmental value ratings from A (highest) to C (lowest). Robert Lake, site #11 on the NFI map, received a rating of A.

Several CONC members and representatives of local residents associations participated in the Kelowna Natural Features Committee (NFC, 1991-93), and the Environmentally Sensitive Areas (ESA) Workshop (1993). The latter was to develop Development Permit Bylaws. A Land Assessment Form for the Robert Lake area was completed by CONC member Brenda Thompson in April of 1991, and submitted to the NFC committee by John Woodworth. Local landowners were involved in the process. A detailed submission was made by land owner Brian Callaghan on April 29, 1993, outlining concerns and problems.⁹ Several excerpts from NFC Minutes highlight some of the concerns.¹⁰

Mr. Callaghan outlined owners concerns and possible solutions to protect lake environment (traffic control, fencing, etc.) as per letter of April 29, 1993 (attached; garbage, motorcycles, etc. using private road to University).

A number of area owners were amenable to protective measures, but would require some City commitment; possibility of covenants on properties has been discussed by Joe Austin.

Ted Johnson enquired as to potential impact of surrounding development on physical condition of lake (e.g. changing water table, flow conditions, etc.).

Mike Whitaker suggested need to consider system of public open space access through this sector, as part of addressing road restrictions, etc. around Robert Lake.

It was moved by Mike Whitaker and seconded by Mike Ladd:

That the Natural Features Committee express its support for protective measures for Robert Lake, which represents an important resource in the City. Carried

The NFC Minutes of August 4, 1993, record plans for a stakeholder's meeting.¹¹

2.3 Environmental Assessment of Robert Lake -- 1993

The September 8, 1993 meeting of the NFC, chaired by Robert Hobson, was dedicated entirely to “establishing a City position on Robert Lake and the issues surrounding it.”¹² This led to a Proposal Call by the City, on October 5, 1993, for a Robert Lake Environmental Assessment.¹³ Tera Planning Ltd. was contracted for the purpose. Their report was completed in December 1993.¹⁴

This *Environmental Assessment of Robert Lake* was a significant result of the persistent efforts by various CONC members who promoted the conservation and enhancement of Robert Lake over the years. The hefty document (59 pages incl. tables and illustrations) covers everything from geology and hydrology to fauna, flora and public consultation. One of the associated maps, shown below, indicates the Composite Environmental Values for Robert Lake as well as Little Robert Lake as “very high”.

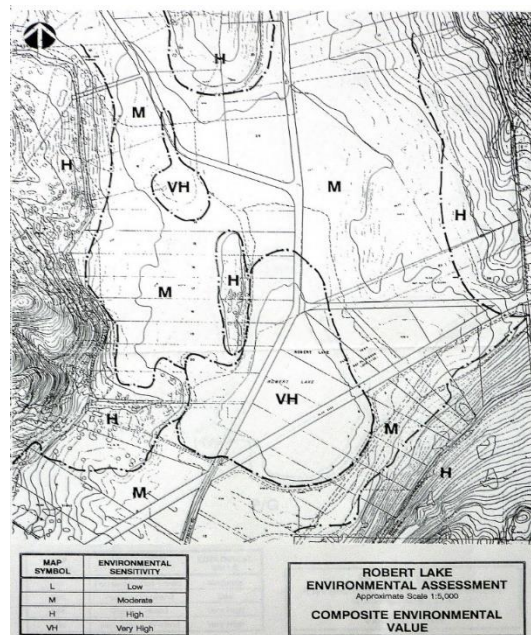


Figure 3: Environmental Assessment 1993

2.4 Robert Lake Regional Park – 1998

The website for the Central Okanagan Land Trust (COLT) describes the history of a small conservation park and public viewing area in the south-west corner of Robert Lake.

In the early 1960s the highways ministry acquired a right-of-way through the middle of the lake. All properties on the eastern shore are serviced by a private road along the lakeshore. In 1998, Karen Frost, who owned land on the western shore, agreed to sell five acres of foreshore and lake bottom to COLT. About \$20,000 of the purchase price came from a single donor in memory of her father, Charlie Clarke.

Since the Regional District needed to subdivide the property for the sale to be complete, the property title went to the Regional District with a covenant held by COLT to ensure it remains in its natural state.

The Regional District has erected an information kiosk there, along with a viewing site that respects wildlife. There is an agreement with the Regional District, that the Central Okanagan Naturalists' Club will be consulted on the management of this unique feature of the valley.¹⁵

2.5 Wetland Habitat Management Strategy – 1998

As indicated by the excerpts below, this Strategy recognizes the importance of protecting endangered species. Yet, Robert Lake is given a Wetland Rating of only “moderate”, even though the provincially blue-listed avocets were known to frequent the lake.

The “red” (endangered/threatened) and “blue” (vulnerable) lists maintained by the B.C. Conservation Data Centre provide guidance on which species are at risk in the Province. Habitat loss is the largest single factor contributing to a species being “asterisk” in B.C. Thus the presence of “red” or “blue” species in a wetland is a rationale for rating a wetland as HIGH. ... Alkaline wetlands are considered high value because they are relatively rare in southern B.C. and even in the Okanagan, being primarily limited to small-catchment areas with low flushing rates (J. Curtis, personal communication, 1998).¹⁶

2.6 Sensitive Ecosystem Inventory: Kelowna – 2007

Under continuing pressure from rural and urban development, the City of Kelowna initiated this inventory to enable ecologically astute land use planning. The figures below point to the urgent need for conserving the few remaining natural area in the City.

Twenty-eight percent of the City of Kelowna was comprised of sensitive ecosystems (SE); less than one percent of the area was included in the other important ecosystem (OIE) categories. Wetlands, old forests, sparsely vegetated ecosystems and broadleaf woodlands were extremely rare in the study area; riparian and grassland ecosystems were uncommon; moderate areas of coniferous woodlands remained. Much of the area was covered by altered ecosystems including extensive urban and rural human settlements and agricultural areas (64% of the study area). Since 1800, there has been a dramatic loss of sensitive ecosystems: approximately 92% of riparian ecosystems, 77% of broadleaf woodlands, 73% of grasslands, 49% of coniferous woodlands, and 47% of wetlands have been lost to human influences. ... Many wetland and riparian ecosystems have become isolated and fragmented.¹⁷

2.7 Wetland Inventory, Classification, Evaluation and Mapping (WIM) – 2009

This inventory was prepared for the City of Kelowna by Ecoscape Environmental Consultants Ltd. The objective of the project was to inform policies and development guidelines for protection of sensitive natural wetlands. It contains the following description of Robert Lake.

Robert Lake (Watershed Code: 310-808200-13900-99100) is identified by the Kelowna WIM project (D1-4) and is described as a transitional saline meadow. Little Robert Lake and the associated wetland complex are classified as shallow open water basin (Wa), with associated tall rush and low rush marshes (Wm06 and Wm07) that occur within the outer wetland margins and

transition to alkali saltgrass (Gs01) and Nuttall's alkaligrass – foxtail barley (Gs02) saline meadow site associations. The lake and wetlands are surrounded by various agricultural and rural residential properties and the new landfill access road occurs within 300 m of the northern end of the lake. Robert Lake and Little Robert Lake have been formed by water draining into the basin from surrounding environments during winter thaw and spring freshet. There is no defined inlet channel, although there is evidence that water may be conveyed from Little Robert Lake to Robert Lake during periods of high water. There is no defined outlet channel and water tends to evaporate from the lakes over the dry summer months rather than drain away. As such, the various salts conveyed into the lake basin (e.g., calcium carbonates, sodium, magnesium, etc.) are left to accumulate and form a crust upon the exposed surface of the lake bottom as water levels decrease. This creates the alkaline environment that gives rise to the highly specialized plant communities that are able to tolerate these conditions. There are no known fish occurrences within the lake, likely due to the high salinity content and alkaline nature of the lake.¹⁸

2.8 Robert Lake Conservation Covenants -- 2010

In 2006, the City of Kelowna purchased the 162 ha (400 ac) Tutt Ranch for \$12 million.¹⁹ A City Memorandum of May 10, 2006, seeks, *"To obtain approval from the Agricultural Land Commission to allow for a reconfiguration of lot lines for the existing 35 titled properties that presently make up the Tutt Ranch."* The major City objectives were the landfill expansion and the extension of John Hindle Drive.

The City has partnered with the Mission Group in pursuing this application, because it achieves certain civic objectives, such as: (a) the creation of a 55 ha (140 ac) parcel to allow for future landfill expansion and landfill buffer (or some other civic use, not yet contemplated at this time); and (b) the establishment of a road connection between Glenmore Road and UBCO, and ultimately Hwy 97. Additionally, there may be an opportunity to secure a restrictive covenant around Robert's Lake for environmental protection.²⁰

Four years later, UBCO acquired 104 ha (256 ac) of this land for \$8.78 million.²¹ Several inquiries brought to light the interesting fact that the City had arranged for environmental covenants with UBCO on the west and north sides of Robert Lake, as well as Little Robert Lake, back in 2010. No one at CONC had been made aware of this fact.

The relevant correspondence from Todd Cashin on October 20, 2016 (archived as "Cashin Revelations"),²² included an approximate location map of these covenants as well as the text of the agreement between the City and UBCO (archived as "Covenants City-UBCO").²³

From a land owner perspective, the land around Roberts Lake has multiple owners while Little Roberts Lake is on land owned solely by UBC (see attached map). As for covenants, City staff secured a covenant for all of Little Roberts Lake and approximately half of Roberts Lake back in 2010 (see covenant attached). From a land use perspective, all of the land around both watercourses are within the Agricultural Land Reserve and fall under the jurisdiction of the Agricultural Land Commission (including the Regional Park in the southwest corner of the lake).

Part B of the Covenant commits UBC (Owner) to preserve the area in its natural state:

In connection with the sale of the Lands by the City to the Owner, the Owner agrees to preserve the portion of the Lands shown outlined in heavy black line and marked Parcels D, E, F, G, H, I, J and K on the Reference Plan of Covenant over Parts of Lots 12 – 21, Block 10, Section 10, Township 23, ODYD, Plan 1068, and Part of Lot 1, Section 10, Township 23, ODYD, Plan 1637 registered under number KAP 91053, a reduced copy of which is attached hereto (the "Covenant Area"), in its natural state and to preserve natural vegetation located on the whole of the Covenant Area;

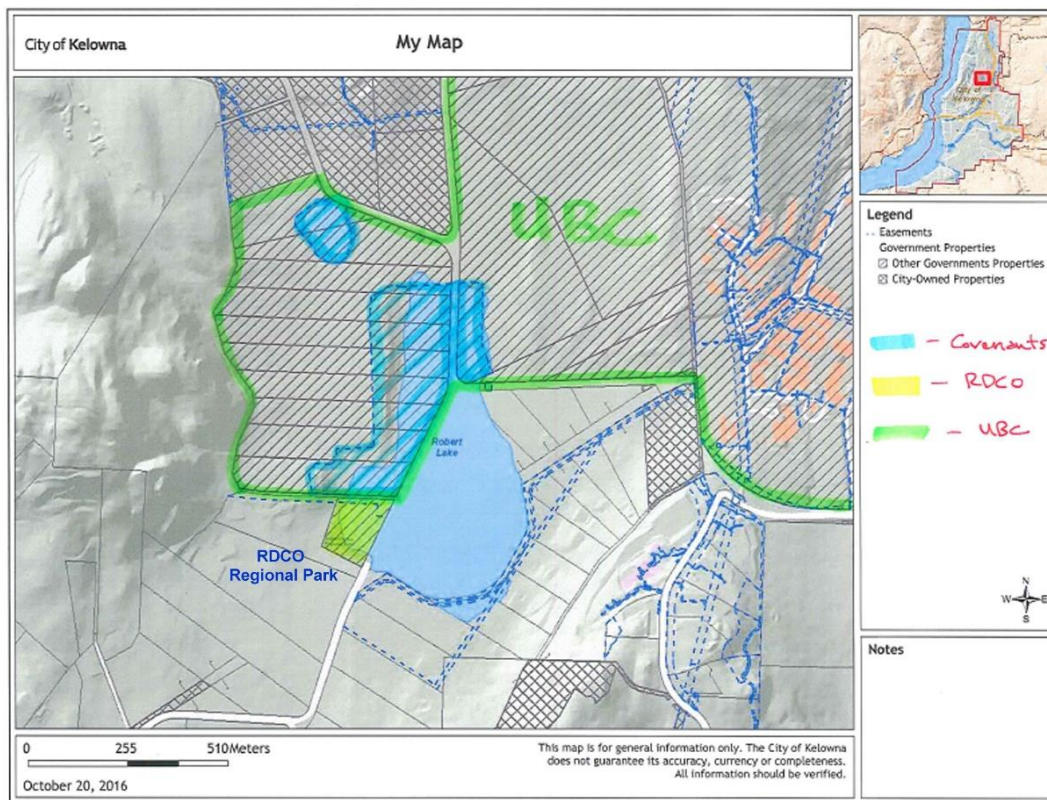


Figure 4: Robert Lake Covenants

3 Recent Activity

3.1 Ecological Analysis to support UBC's Okanagan Campus Master Plan Update – 2014

The University of British Columbia (UBC) commissioned its own comprehensive environmental study as an aid to campus planning. The report contains detailed lists of plants and wildlife observed in the Robert Lake area, including many blue-listed and some re-listed species, such as the American Avocet.²⁴

3.2 The John Hindle Drive Extension -- 2016

The impending construction of the John Hindle Drive extension raised concerns about its impact on Robert Lake, as indicated by a flurry of e-mails in the summer of 2016. Brian Callaghan, who previously approached the NFC in 1993, addressed his latest concerns to Bryn White at the BC Ministry of Forests Lands and Natural Resources (FLNR) on June 24, 2016. After several passes through cyberspace, this communication eventually landed in Rick Gee's inbox. The e-mail implied an appeal to the CONC Conservation Committee to get involved (archived as "Callaghan Concerns").²⁵ A major concern of Callaghan's was the storm drain system.

This week, we had a meeting with the city about easement issues and were told during discussions about the storm drain issues that runoff would percolate upwards and recharge Robert Lake levels to higher levels. I was also told at this meeting that Ron Matussi (City Manager) had acquired a statutory right of way ... from Land Titles for the storm drain system at Robert Lake on the UBCO lands. ... So in conclusion, I am very concerned about the close proximity of the planned highway to the environmentally sensitive areas of the northeast portion of Robert Lake and the storm drain

construction to divert waters into this unique wetland area that is one of the last remaining clay catchment areas in the Okanagan that have not been destroyed.

A bit of sleuthing revealed that on May 18, 2016, Martha C. Piper, Interim President and Vice-Chancellor of UBC, approved a report for submission to the Board of Governors concerning the John Hindle Drive Roadway Statutory Right of Way. Part of this document presents the details of the controversial storm drainage system shown below.²⁶

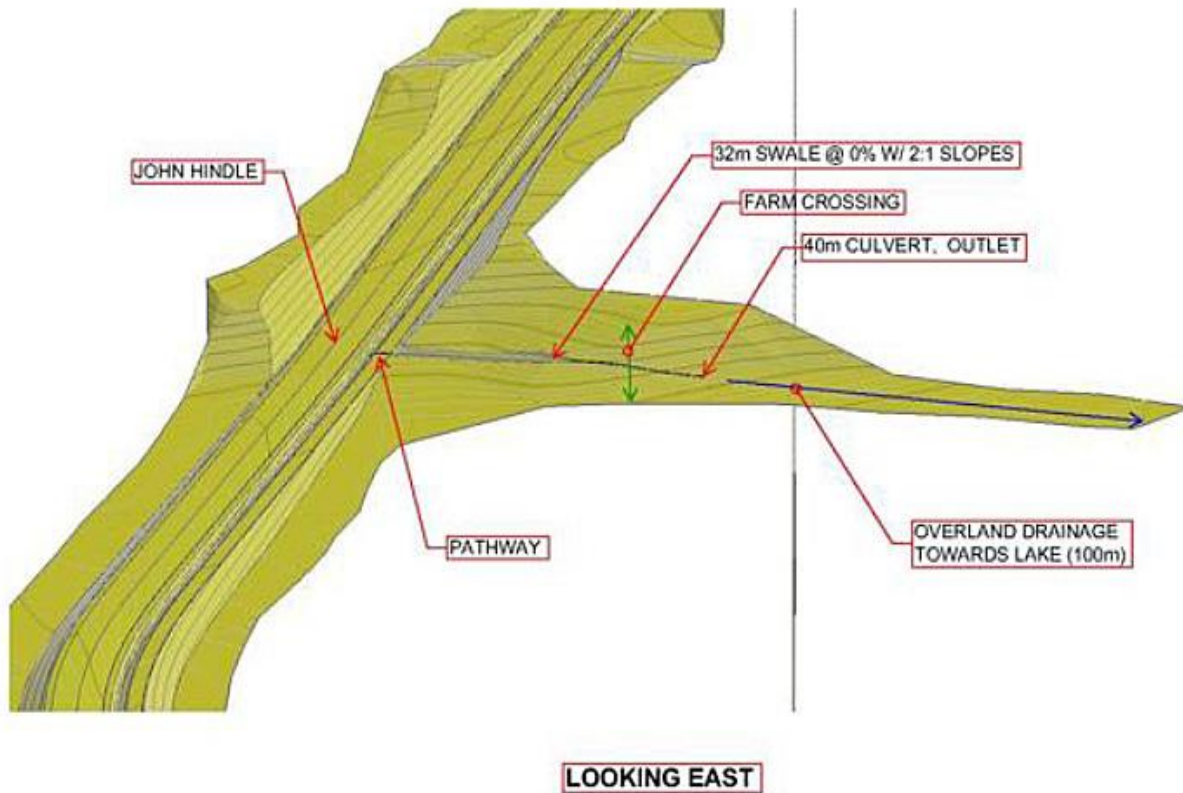


Figure 4: Storm Drainage System

On September 01, 2016, Laura Hooker, president of the Okanagan Land Trust (COLT), e-mailed a brief account of her meeting with Ministry of Transport personnel about John Hindle Drive-Robert Lake to Rick Gee via Ian Walker (archived as "Hooker Report").²⁷ The meeting covered environmental issues connected with the road extension project. Laura's final comment again highlights continuing public apprehension.

A couple of the people at the meeting said that they been inundated with phone calls about the project, and were feeling a little besieged. So, Ian and Hugh, could you pass this information along to CONC. Tanis, if needed, could you make other concerned conservation groups known about this ... There is nothing like a lack of information to set people's more paranoid fantasies to flight.

3.3 John Hindle Drive Public Information Session

A public information session on the John Hindle Drive Extension Project was held by the City's Integrated Transportation Department on September 14, 2016. The relevant website displayed several panels including the following on environmental commitments. It appears that the storm drain problem was taken into consideration.

John Hindle Drive Extension Project Ministry of Transportation and Infrastructure Environmental Considerations

The following mitigation measures have been included in the design of this project:

- *Storm water management plan, with particular attention to sensitive natural areas.*
- *Check dams along drainage channels for flow control and to remove sedimentation.*
- *Vegetation, such as cattails, will treat road run off and assist in reducing water speeds and encourage settlement of sedimentation.*
- *Ditches will be lined with rock on steep section to reduce water speeds, and to resist and reduce erosion.*
- *Drainage culverts will be installed to maintain the existing drainage patterns in the project area. Culverts will be sized to allow animal passage under the road.*

This project will ensure construction activities comply with Environmental Timing Windows (i.e. bird nesting windows).

The contractor will be required to provide a Construction Environmental Management Plan (CEMP) detailing the approach to be taken in addressing environmental issues. A qualified Environmental Monitor will be on site during construction to monitor activities and ensure the mitigation measures are implemented.²⁸

3.4 Environmental Assessment of Robert Lake – 2016

In response to an inquiry on October 13, 2016, Scott Boswell, Manager of the Okanagan Collaborative Conservation Program (OCCP), indicated that an environmental impact report for John Hindle Drive had not yet been released to the public.²⁸ However, as a representative of CONC, a long-time stakeholder, the author was able to obtain a copy of the report titled, *FINAL REPORT, City of Kelowna--Ministry of Transportation and Infrastructure, John Hindle Drive 100% Detailed Design, Glenmore Landfill Entrance to Alumni Avenue--Environmental Assessment*. This report documents several blue-listed as well as red-listed plant and animal species occurring in the subject area.³⁰

3.5 UBC Access Fight – 2016

A 2010 article in the Okanagan student's newspaper, *The Phoenix*, describes a disagreement between UBCO and the landowners on the east side of Robert Lake.

Enemies at the Gate

The conflict between the University of British Columbia and the residents along what has come to be known as the Curtis Road easement has gone on for the better part of two decades. ... Tensions came to a head this school year, when residents constructed a gate, blocking out pedestrian and cyclist access from Glenmore to the university, and now everyone is up in arms, whether they be bikers who want to bike, residents who want peace and quiet, or a pair of professors who don't care but have a gate on their property.³¹

As recent as October of 2016, UBCO was appealing a B.C. Supreme Court ruling which barred campus access via Curtis Road.³² It remains to be seen whether the John Hindle Drive access will extinguish this court battle. One can only hope that with the passing of time, and fresh faces in office, this triangle of aggravation between City, UBCO and the landowners, will fade into history. Then a renewed attempt at environmental protection of the eastern shoreline of Robert Lake may become feasible.

3.6 Viewing Platform at the Robert Lake Regional Park

Rick Gee provided the following information in an e-mail dated September 30, 2018.

Roland,
Apparently there have been plans for years to have a platform at Robert Lake, but they came to nothing.
The current round of planning began with a donation to CONC in December 2017. The donors agreed that some of the donation should go to a birding platform at Robert Lake. The donors wish to remain anonymous.
The Regional District has designed the platform with input from Dave Palsat and me, with feedback from many other birders. No consideration has been given to extra parking, although your suggestion has merit.
Rick

3.7 The Avocets of Alki and Robert Lake -- Concerns

Following are excerpts from several sources highlighting the urgency of intervention on behalf of the beleaguered avocets at Alki and Robert lakes.

From *Status of the American Avocet in British Columbia* (Gebauer 2000):³³

The plight of avocets at the Glenmore Land Fill site in Kelowna has been regularly featured in local newspapers, on CBC radio, and CBC TV news reports, reflecting the high public concern for this species. The Central Okanagan Naturalists Club has taken an active role in pursuing opportunities to protect and enhance this species, and has garnered support from a number of organizations including the City of Kelowna, Canadian Wildlife Service, Okanagan University College, the Central Okanagan Foundation, and B.C. Ministry of Environment, Lands and Parks. American Avocets are highly prized by bird watchers and photographers wherever the birds are encountered in British Columbia. Some of these people make regular excursions to the Alki and Robert Lake areas to observe this conspicuous, and easily recognizable species. ... The S1S2B rank warrants uplisting the American Avocet from the provincial Blue List to the Red List as a candidate for Endangered status. If nesting habitats at Alki Lake are lost, and additional breeding sites in the province are not discovered, the ranking should be changed to S1B.

From *American Avocet and Black-necked Stilt breeding status and population trends at Kelowna* (Gyug and Weir 2017):³⁴

In the 1960's, Alki Lake became the City of Kelowna sanitary landfill. In the mid 1980's, the southern half of Alki Lake was allowed to revert to a shallow alkaline lake. Eventual re-expansion of the landfill into the southern half of Alki Lake prompted the habitat studies reported in a companion paper (Gyug and Weir 2017) to inform mitigation planning for eventual landfill re-expansion into the breeding colony at Alki Lake.

From *Grant Allows Habitat Restoration To Take Flight* (City 2016):³⁵

The City of Kelowna has received a \$30,000 Water Conservation and Quality Improvement grant from the Okanagan Basin Water Board (OBWB). The grant will contribute to restoring and protecting the wetland habitat and breeding grounds of the American Avocets at the Glenmore Landfill.

"In 2010, the City constructed a dam at the Glenmore landfill to support a new wetland habitat for the American Avocet. Unfortunately, the Avocets have not adopted the new habitat for nesting. The pond depth may not be adequate to meet their needs."

The new wetland was created to replace a habitat that the Avocet's created on top of the southern portions of the landfill. As the northern parts of the landfill are being filled, the storage and processing areas for the recycling will need to be relocated in the south and will begin to infringe upon the current habitat.

"The grant will be used to investigate whether we can enhance the Avocet Pond so that it is better used, enhance existing wetlands south of the landfill, or create a new depression and wetlands more suitable for the Avocets," said Reeder.

It's estimated that nearly 900 visits made to the Glenmore Landfill annually are to view the Avocet. In total, the habitat restoration project will be \$60,000. The remaining funding will come from the Glenmore Landfill Reserve Fund. Future phases include implementation of the enhancements, monitoring Avocet activity and public education.

Les Gyug was working on this project with Ecoscape Environmental Consulting on a City contract. His report, completed in the fall of 2017, has not yet been released to the public. An inquiry produced this response from Rod MacLean, Manager—Utility Planning, City of Kelowna, dated April 16, 2018:

Hi Mr. Gebauer,

Corey forwarded me your request for the Avocet Study being conducted by Ecoscape. The report is incomplete at this time, and remains in draft form without any recommendations moving forward. This is partly due to the long term landfill closure plan, fill plan and storm water management plan happening concurrently. I have been more recently involved with the storm water plan, and have been working to create a riparian habitat solution that includes the saline water conditions necessary for Avocet and other wildlife. Once we're past this freshet season, we will re-initiate the process for Ecoscape to complete the project. We will forward the completed study as soon as this is done.

Thanks

Rod

Rod has not yet replied to my October query.

4 Recommendations

I suggest the following items for discussion:

1. With UBC being a major owner of Robert Lake and environs, I suggest that CONC initiate the formation of a Robert Lake Conservation Committee (RLCC) consisting of representatives from UBCO, CONC, RDCO, the City and one or two interested landowners, such as Brian Callaghan. These stakeholders have a common interest in the conservation and enhancement of Robert Lake as a viable wetland, a valuable ecological reserve and an attractive community resource.
2. An attempt should be made to pressure the City to release to the public, and act on the *Avocet Enhancement Report* completed by Ecoscape Environmental Consultants Ltd. in 2016.
3. The construction of an elevated viewing platform and associated parking space should be reviewed. The present parking area is inadequate—too small and often inaccessible due to flooding. Flooding could possibly be mitigated by raising the road bed and adjacent farm access by six to eight inches. Parking could be provided off Curtis Road near the entrance to the private drive. The appropriate owners of the property to the south-east side of the private gate should be approached regarding the sale of a suitable piece of land to the City.

4. Perhaps sufficient time has passed to erase the aggravations of the past, and landowners on the east side of Robert Lake could be approached again about protective covenants on their portion of land submerged under the lake. There have been indications of willingness in this direction in the distant past. Chain link fencing would provide protection of the riparian area from cats, dogs and other quadruped predators.

5. Last but not least the RLCC could keep an eye on the impact of the expanding landfill and John Hindle Drive on Robert Lake, e.g. water quality, road lighting, traffic etc.

SOURCES

Note: The designation 'DA' refers to a Digital Archive (SDD chip) which will be passed on to Rick Gee.

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