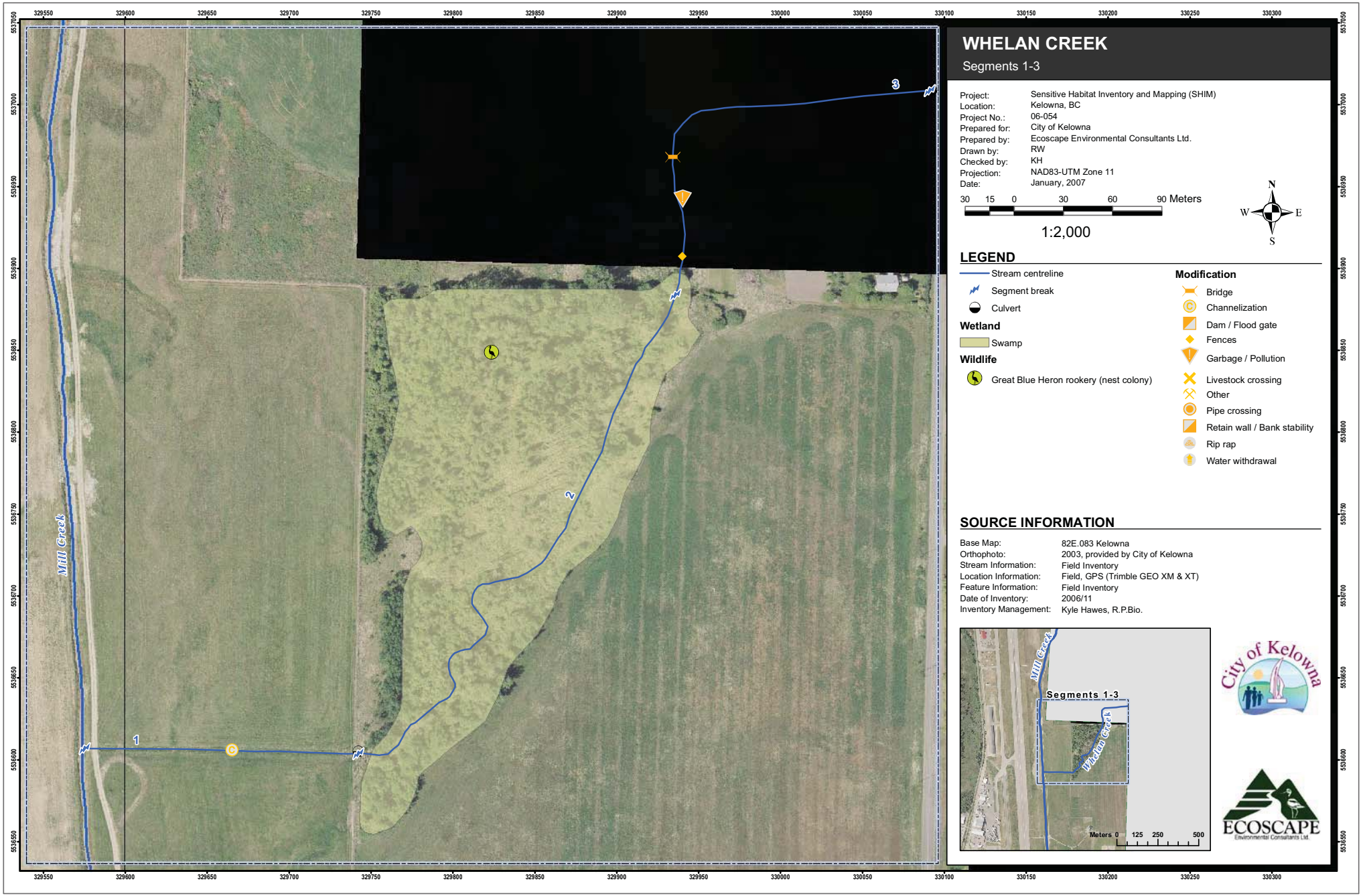


WHELAN CREEK

Segments 1-3

Project:	Sensitive Habitat Inventory and Mapping (SHIM)
Location:	Kelowna, BC
Project No.:	06-054
Prepared for:	City of Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	RW
Checked by:	KH
Projection:	NAD83-UTM Zone 11
Date:	January, 2007

30 15 0 30 60 90 Meters

1:2,000

N W E S

LEGEND

- Stream centreline
- Segment break
- Culvert

Wetland

- Swamp

Wildlife

- Great Blue Heron rookery (nest colony)

Modification

- Bridge
- Channelization
- Dam / Flood gate
- Fences
- Garbage / Pollution
- Livestock crossing
- Other
- Pipe crossing
- Retain wall / Bank stability
- Rip rap
- Water withdrawal

SOURCE INFORMATION

Base Map:	82E.083 Kelowna
Orthophoto:	2003, provided by City of Kelowna
Stream Information:	Field Inventory
Location Information:	Field, GPS (Trimble GEO XM & XT)
Feature Information:	Field Inventory
Date of Inventory:	2006/11
Inventory Management:	Kyle Hawes, R.P.Bio.

City of Kelowna

ECOSCAPE Environmental Consultants Ltd.

Whelan Creek
Segment(s): 1 - 3

Segment	Primary	Secondary	Length (m)	Hydraulic	Gradient (%)	Crown Closure	Spawning Habitat	Comment Class
1.0	Ditch	Ephemeral	167.298	Slough	0.0	0	Unknown	Ditched through airfield
2.0	Natural	Wetland	383.028	Wetland	0.0	71-90%	Unknown	Wetland.
3.0	Modified		259.745	Slough	0.5	21-40%	Unknown	

	Substrates (%) [a]						Channel (m)				
Segment	O	F	G	C	B	R	Wetted Width	Bankfull Width	Wetted Depth	Bankfull Depth	Comment Substrates/Channel
1.0	5	95	0	0	0	0	0.00	1.50	0.00	0.20	
2.0	99	1	0	0	0	0	0.30	2.50	0.10	0.30	Moderately defined channel through wetland complex.
3.0	40	60	0	0	0	0	1.00	1.80	0.08	0.30	Partly channelized - ditched/naturalizing riprian.

a. Substrate codes: O=organics; F=silt/sand; G=gravel; C=cobble; B=boulder; R=bedrock

	Left Bank Riparian							
Segment	Class	Qualifier	Stage	Shrub cover	Snags	Veteran Trees	Bank stability	Comment
1.0	Herbs/grasses	Disturbed		<5%	No	No	Medium	
2.0	Natural wetland	Natural	mature forest	67-100%	>=5	>=5	High	
3.0	Herbs/grasses	Disturbed	tall shrubs 2-10m	34-66%	No	No	Medium	Intermittent clearings predominated by reed canary grass.

	Right Bank Riparian							
Segment	Class	Qualifier	Stage	Shrub cover	Snags	Veteran Trees	Bank stability	Comment
1.0	Herbs/grasses	Disturbed		<5%	No	No	Medium	
2.0	Natural wetland	Natural	mature forest	67-100%	>=5	>=5	High	
3.0	Broadleaf forest	Disturbed	sapling >10m	67-100%	No	No	Medium	Some open graminoid sections but predominantly cottonwood sapling and tall shrub thickets.

Segment	Comment - Flora	Comment - Flora
1.0	Exclusively graminoids.	
2.0	Cottonwood;alder;red-osier dogwood;willow sp.;hawthorn;rose sp.;reed canary grass;cattail	Great Horned Owl;Great Blue Heron;Black Billed Magpie;European Starling.
3.0	Cottonwood;reed canary grass;alder;hawthorn;rose;red-osier dogwood.	

	Level of Impact [c]		Enhancement Opportunity	
Segment	Rating	Comment	Rating	Comment
1.0	Both_banks_high	Ditched - devoid of canopy.	Nil	Limited opportunity due to airport.
2.0	Nil		Very_high	Protect this wetland complex from disturbance.
3.0	1_bank_high	Naturalizing - partially ditched..	Low	Establish large buffer and allow riparian area to regenerate.

c. Impact rating: 6=nil; 5 = 1-bank low; 4 = 1-bank moderate; 3 = 1-bank high; 2 = both banks low; 1 = both banks moderate; 0 = both banks high


Segment 1


Segment 2


Segment 3