DISTRICT OF WEST KELOWNA

Master Drainage Plan
Volume II

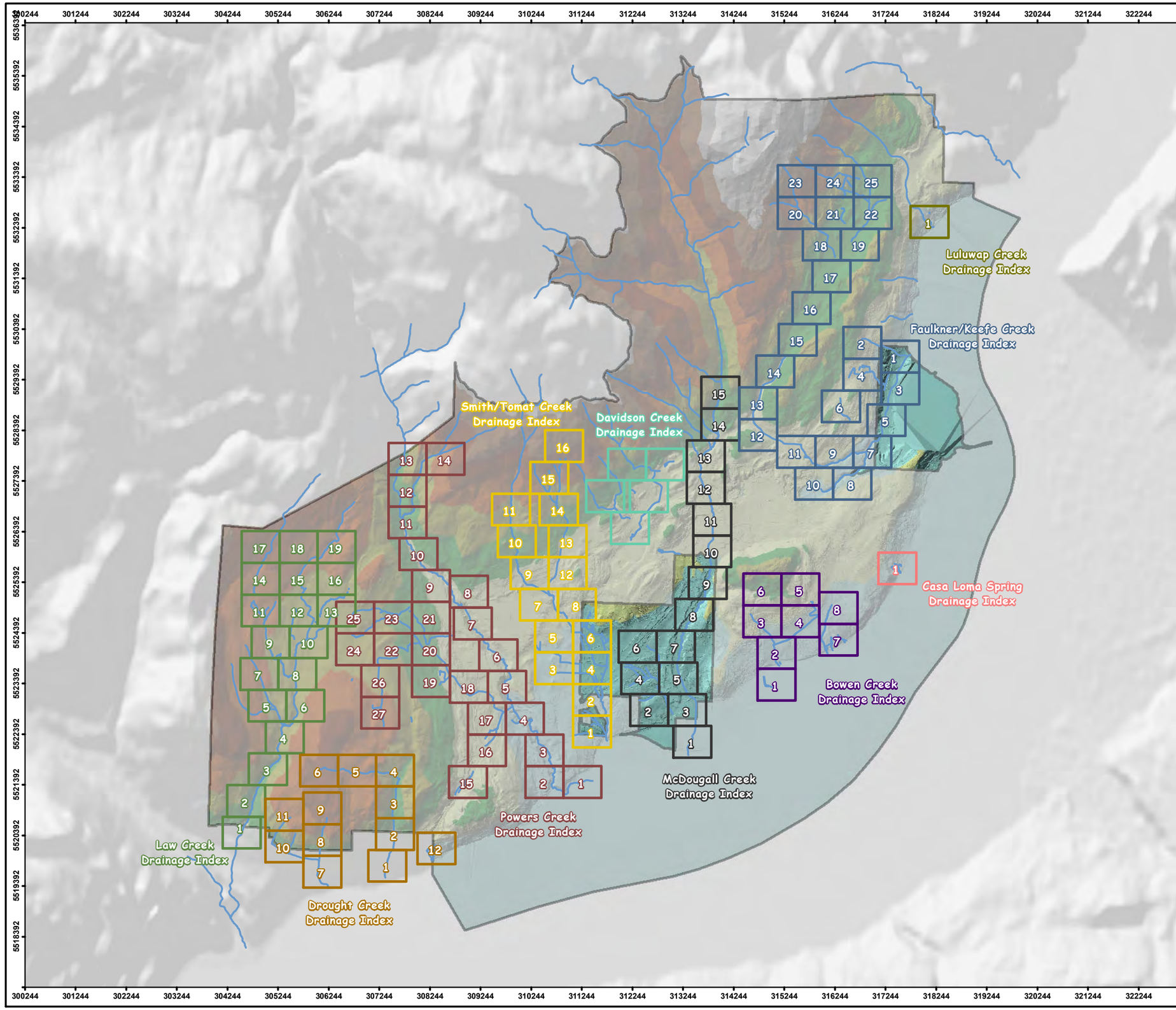
Impact and Habitat Rating Mapsheets
Sensitive Habitat Inventory Mapsheets

Adopted: October 25, 2011

ECOSCAPE
Environmental Consultants Ltd.

RSB
ENGINEERING

West Kelowna Impact and Habitat Rating - Index Map



Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 1,000 500 0 1,000 2,000

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	District of West Kelowna Streams
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- Stream
- District of West Kelowna Boundary
- Smith/Tomat Creek Drainage Index
- Davidson Creek Drainage Index
- Powers Creek Drainage Index
- McDougall Creek Drainage Index
- Luluwap Creek Drainage Index
- Law Creek Drainage Index
- Faulkner/Keefe Creek Drainage Index
- Drought Creek Drainage Index
- Casa Loma Spring Drainage Index
- Bowen Creek Drainage Index

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

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- Moderate
- Low

Impact Rating Score (Bank - Bank)

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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

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Impact Rating Score (Bank - Bank)

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

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- 1 (Moderate - High)
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- 3 (Low - Moderate or Nil - High)
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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Bowen Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Bowen Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
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Habitat Ratings

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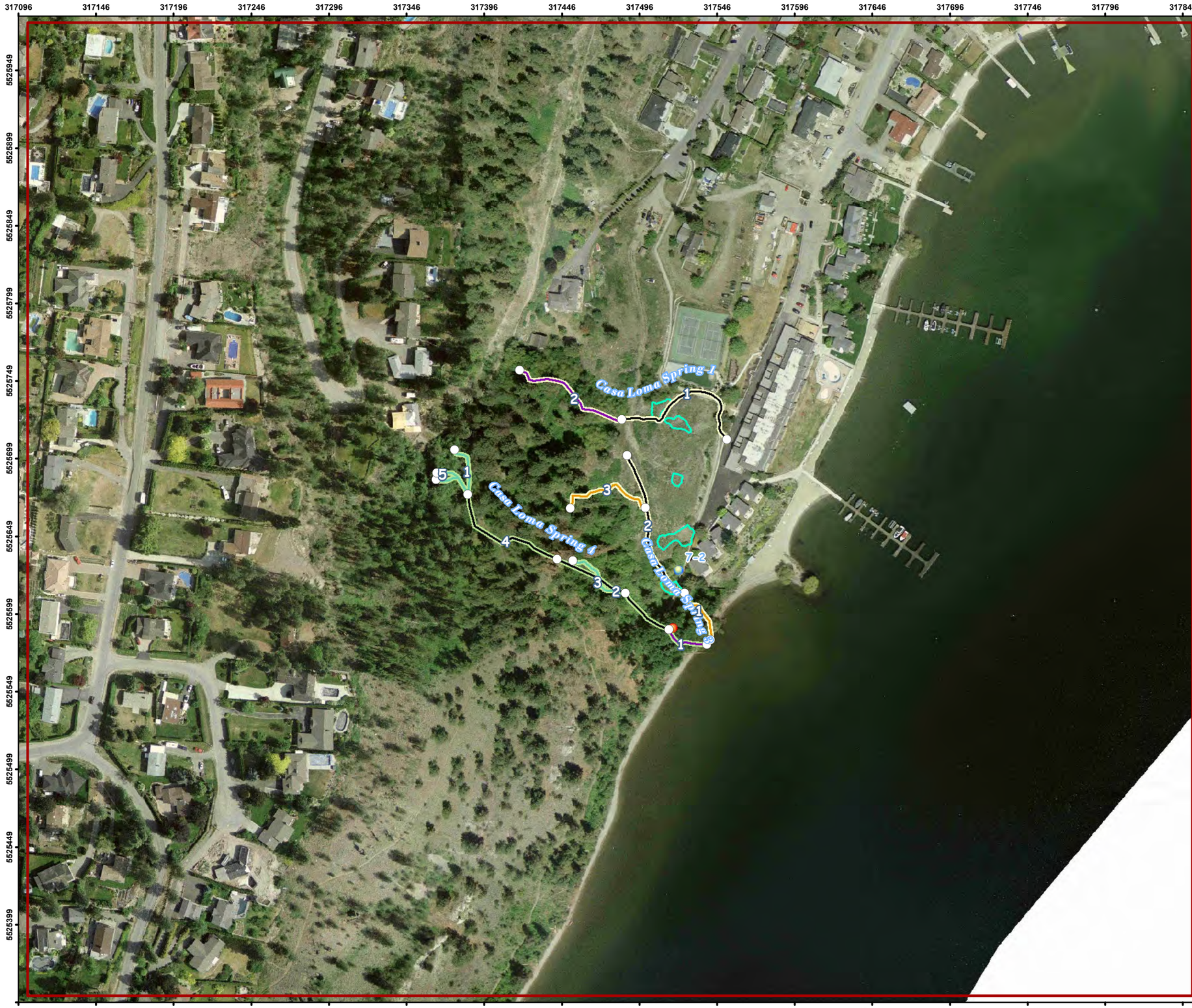
District of West Kelowna



Casa Loma Spring Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Casa Loma Spring Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

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Impact Rating Score (Bank - Bank)

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Davidson Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
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Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
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Habitat Rating

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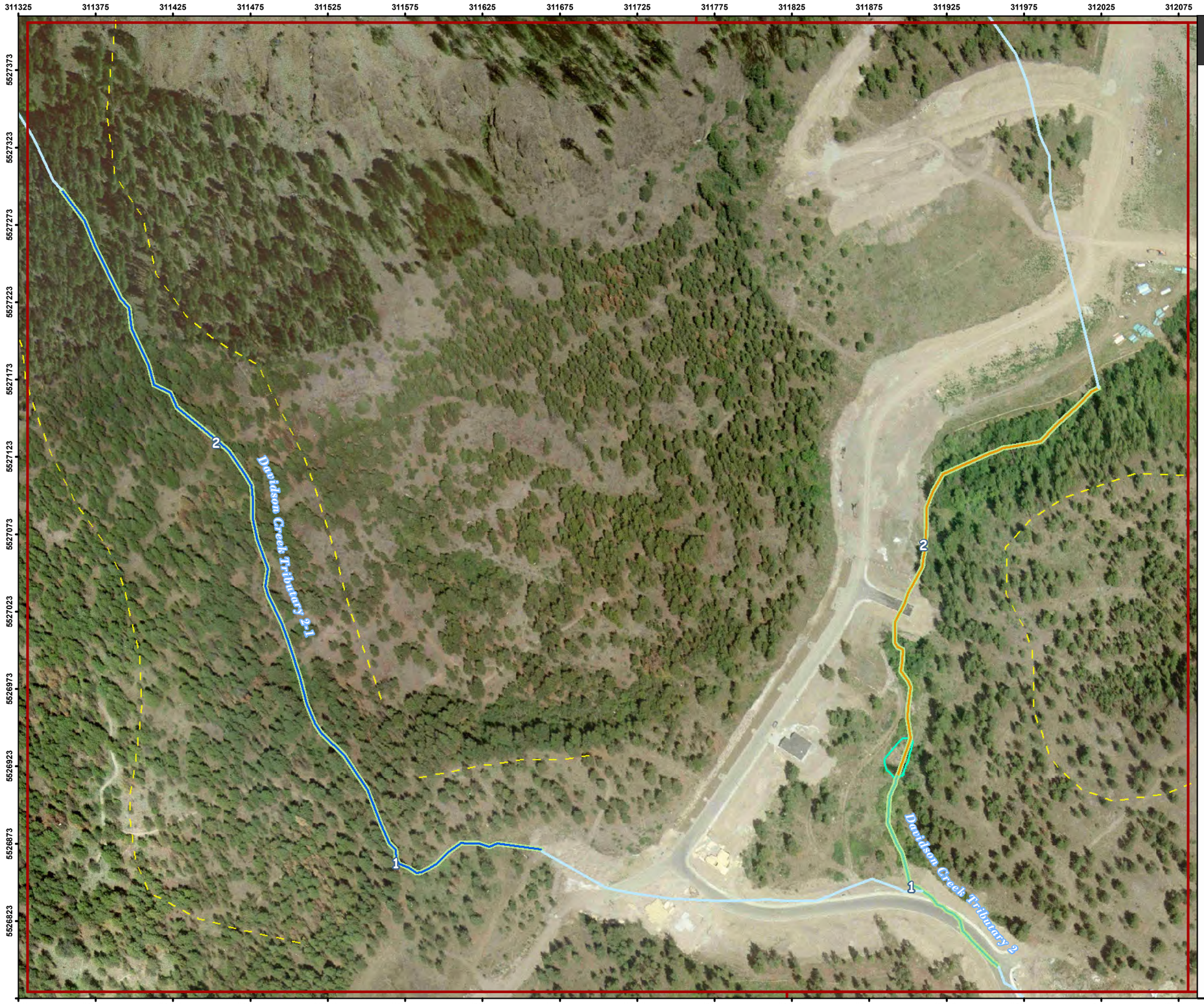
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Davidson Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

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Habitat Ratings

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High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Davidson Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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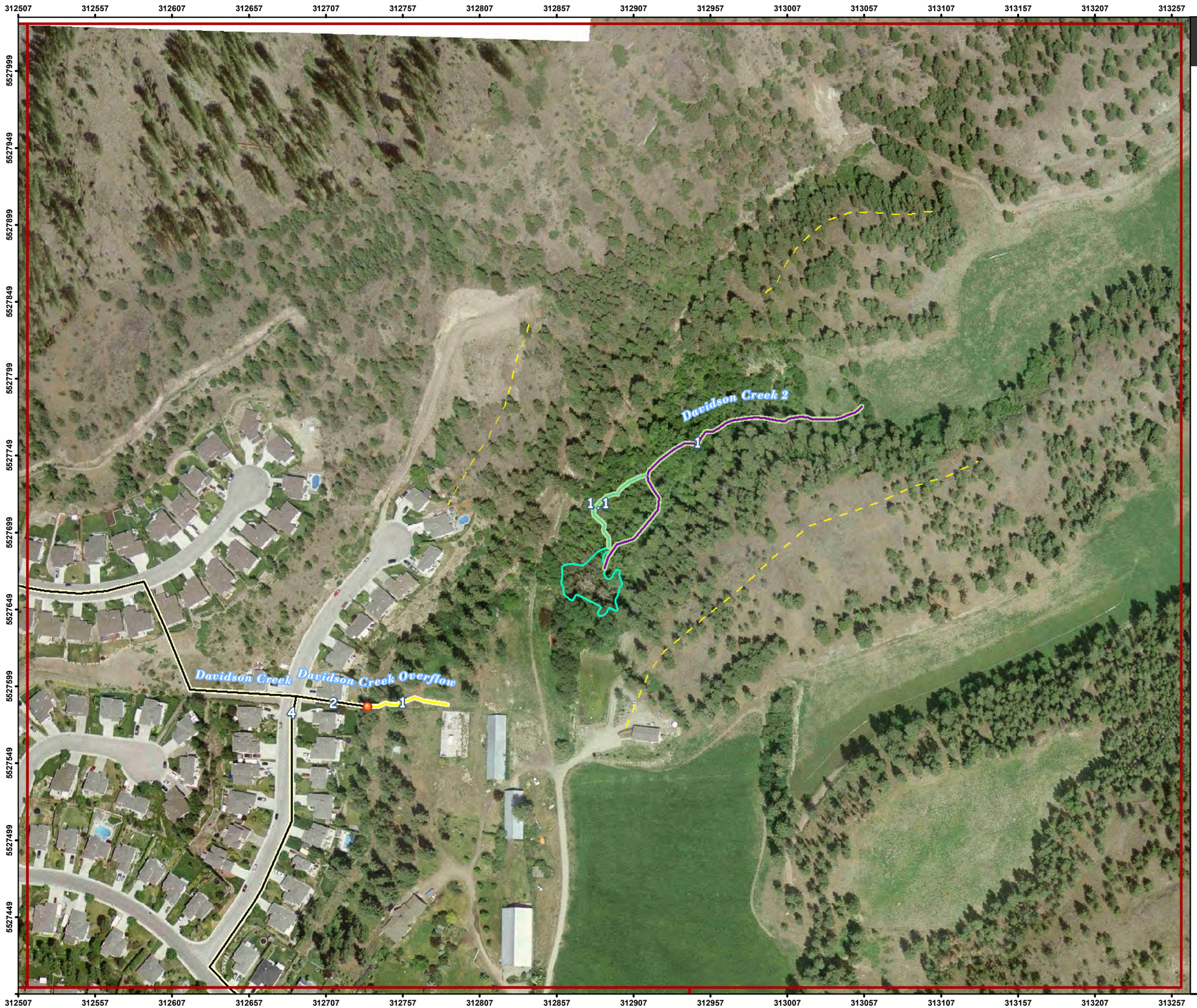
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Davidson Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Davidson Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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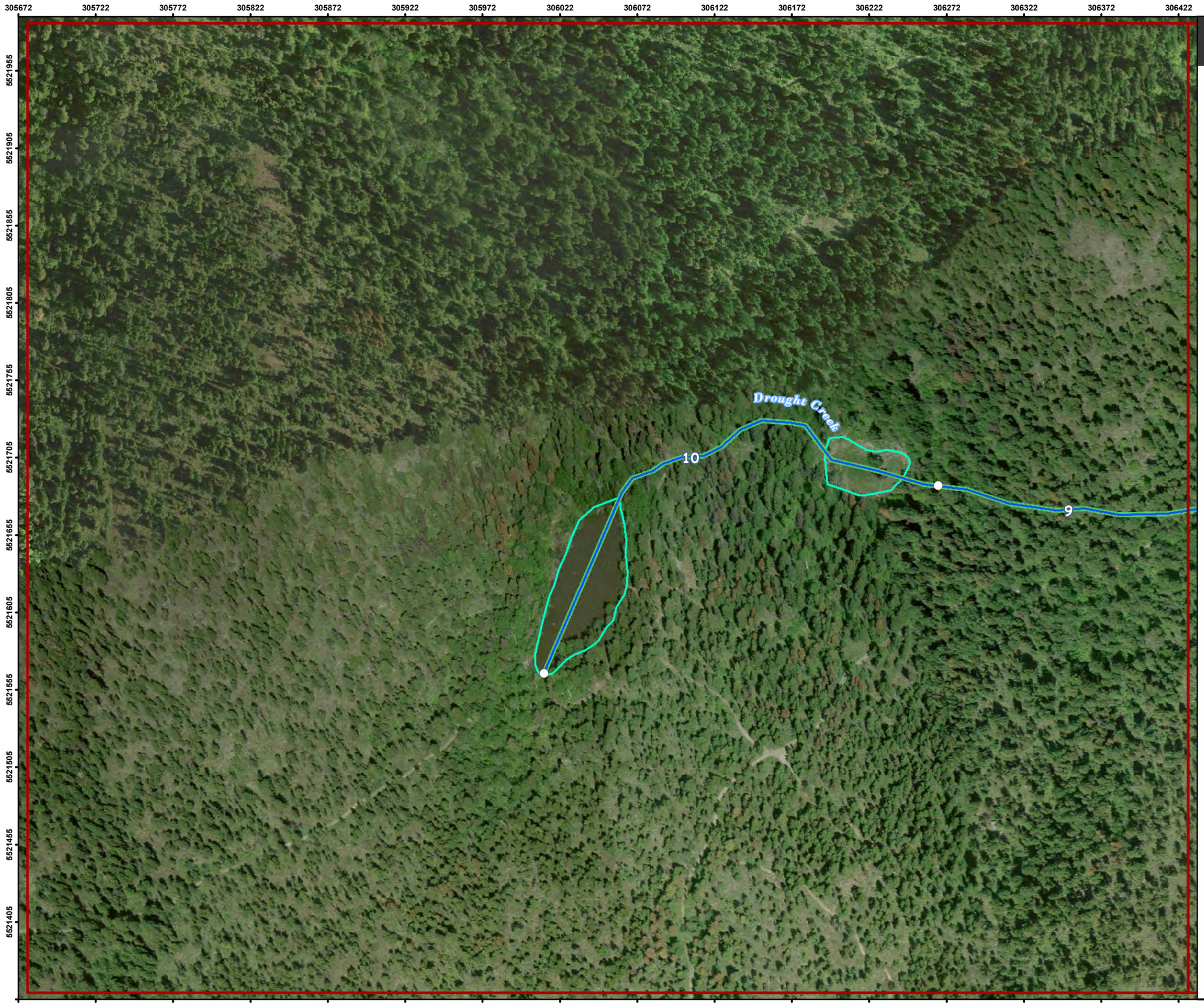
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Drought Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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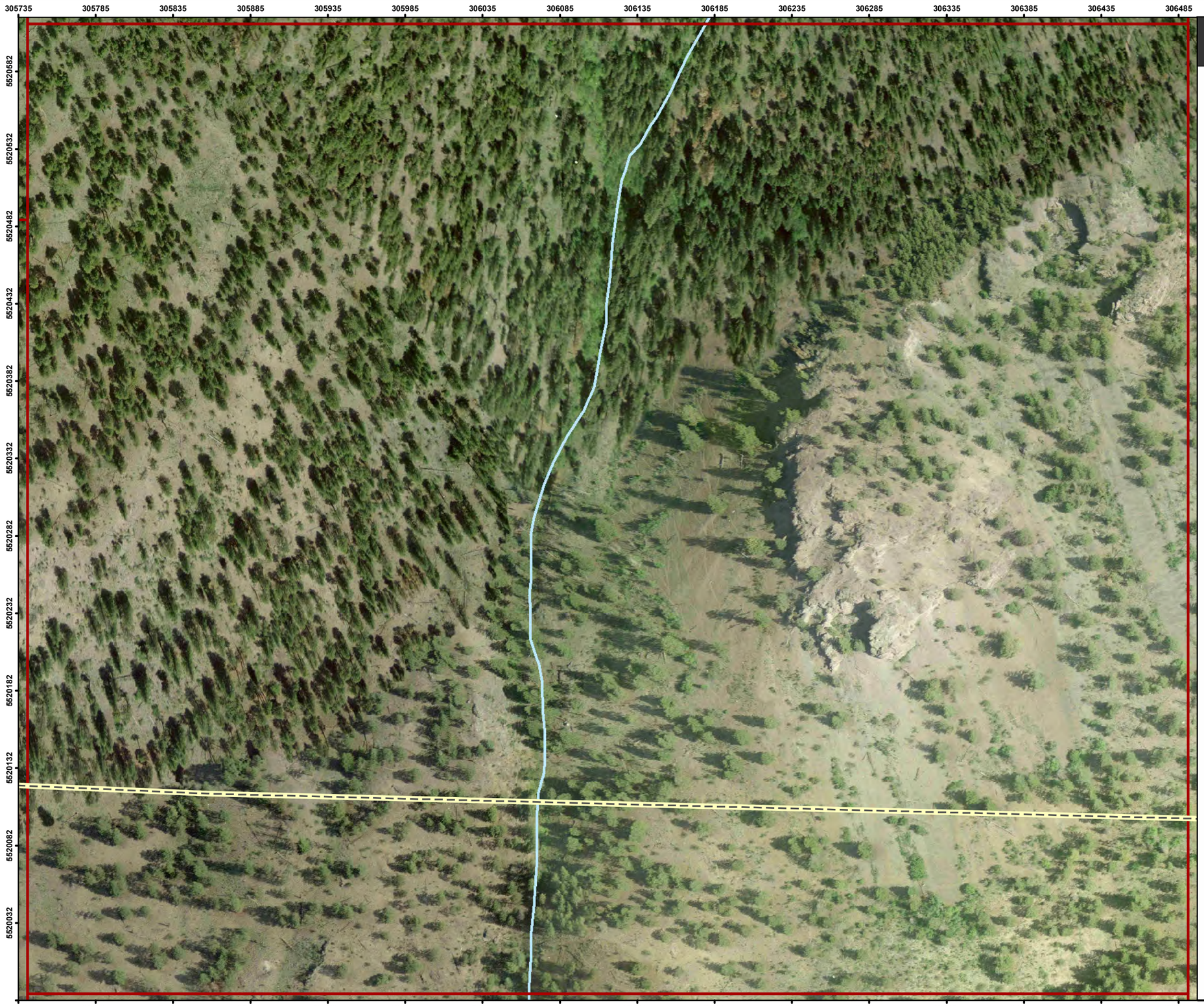
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Drought Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Drought Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Drought Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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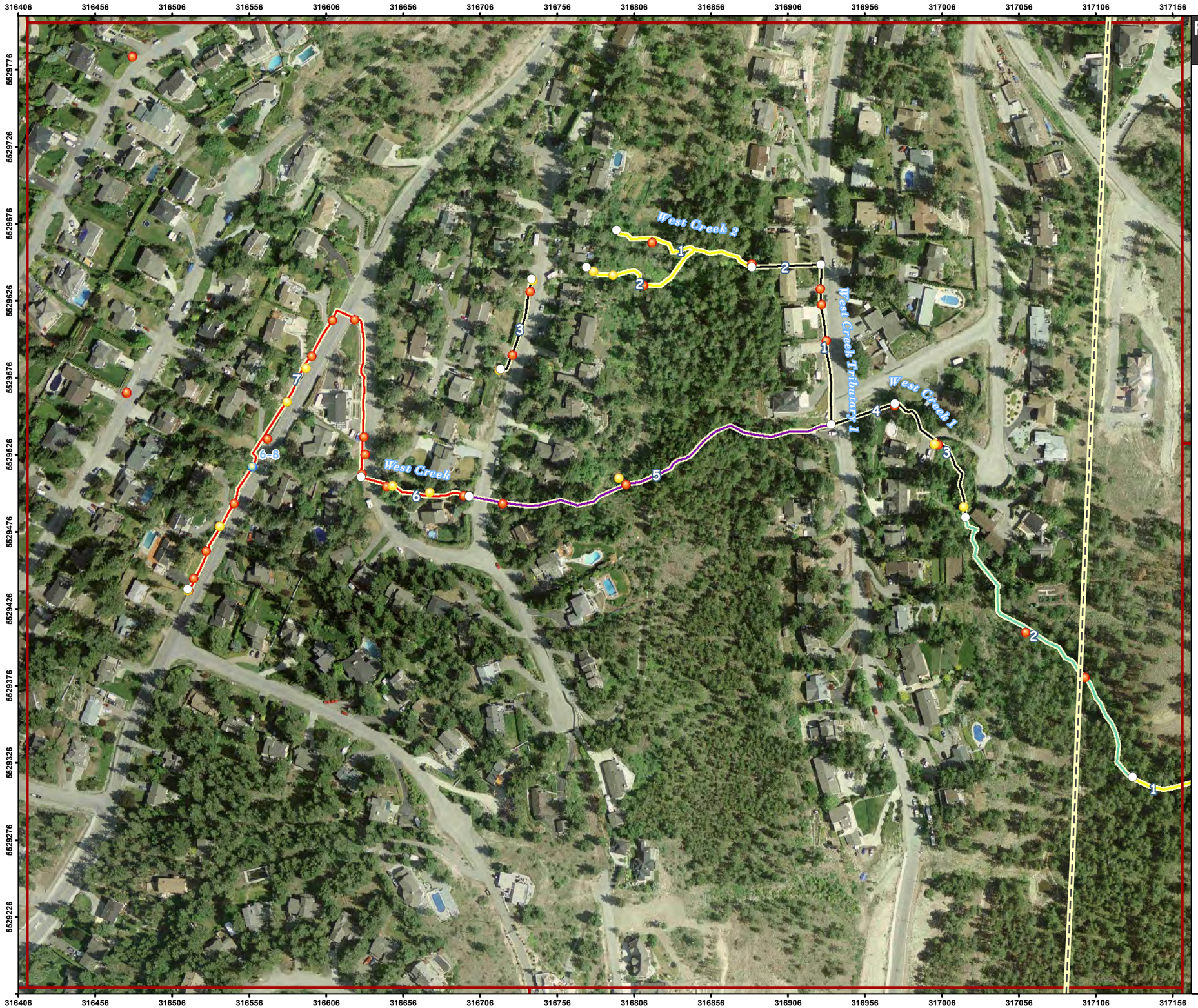
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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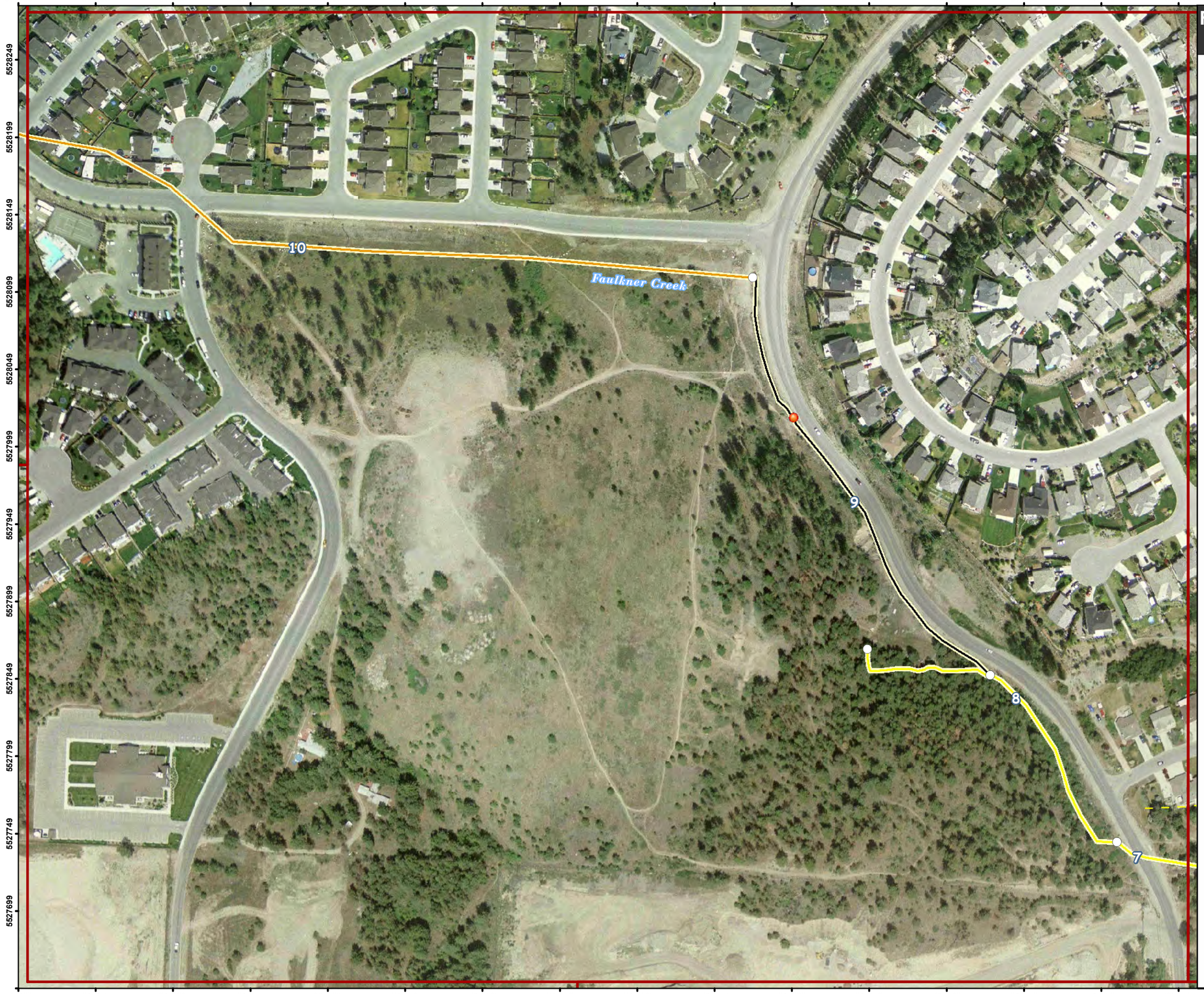
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 13

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 14

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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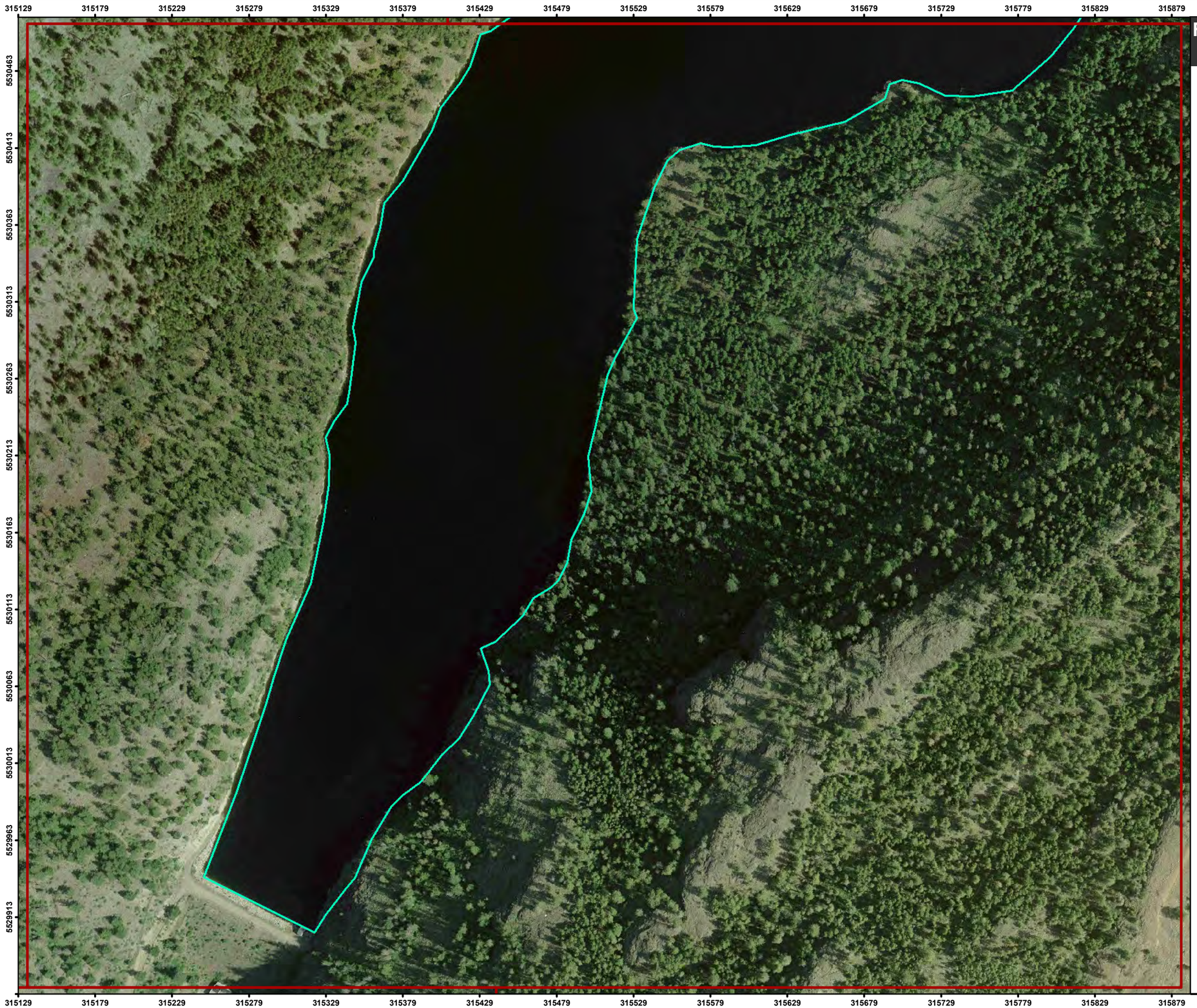
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 15

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 16

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 17

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 18

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 19

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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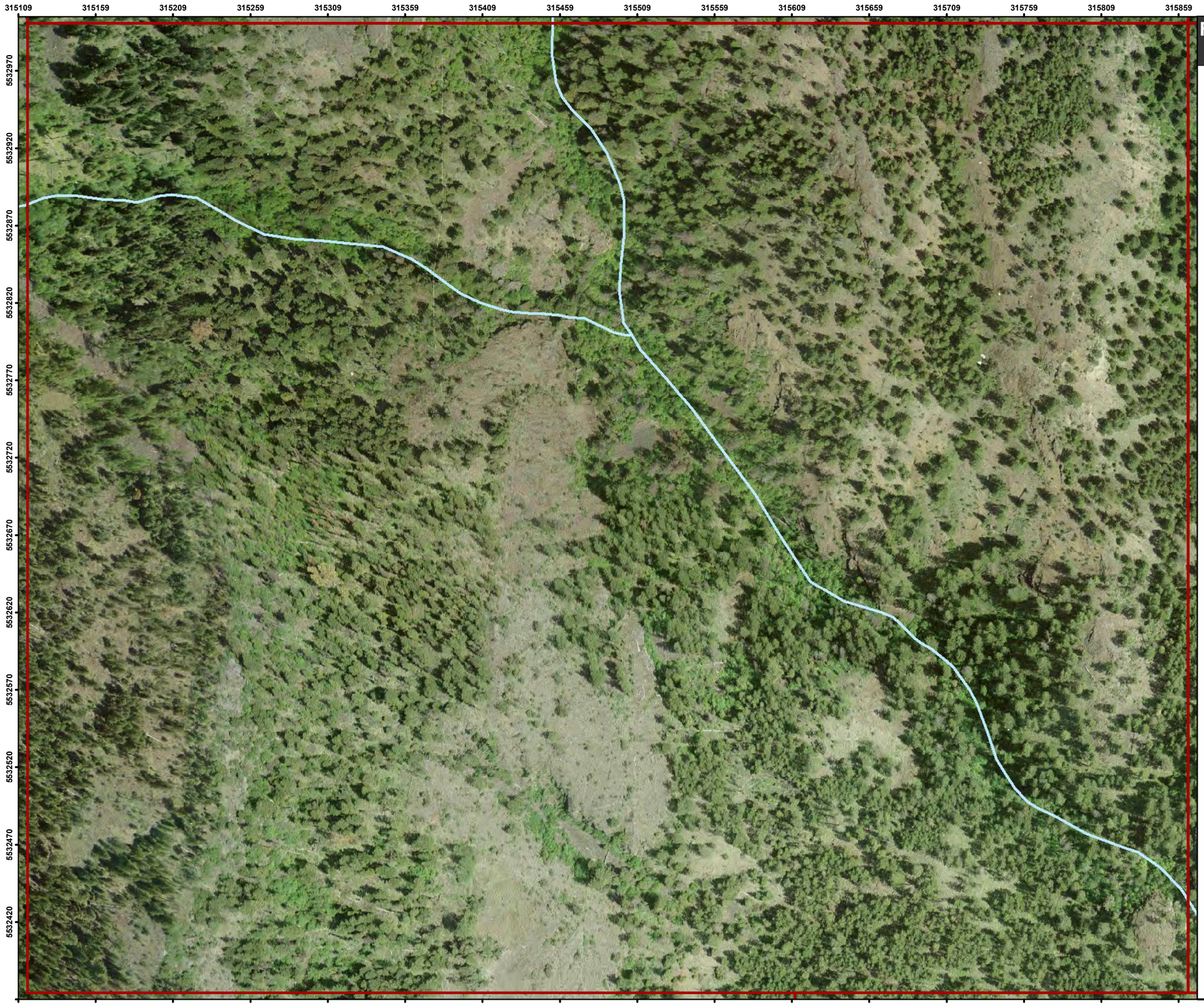
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 20

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 21

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 22

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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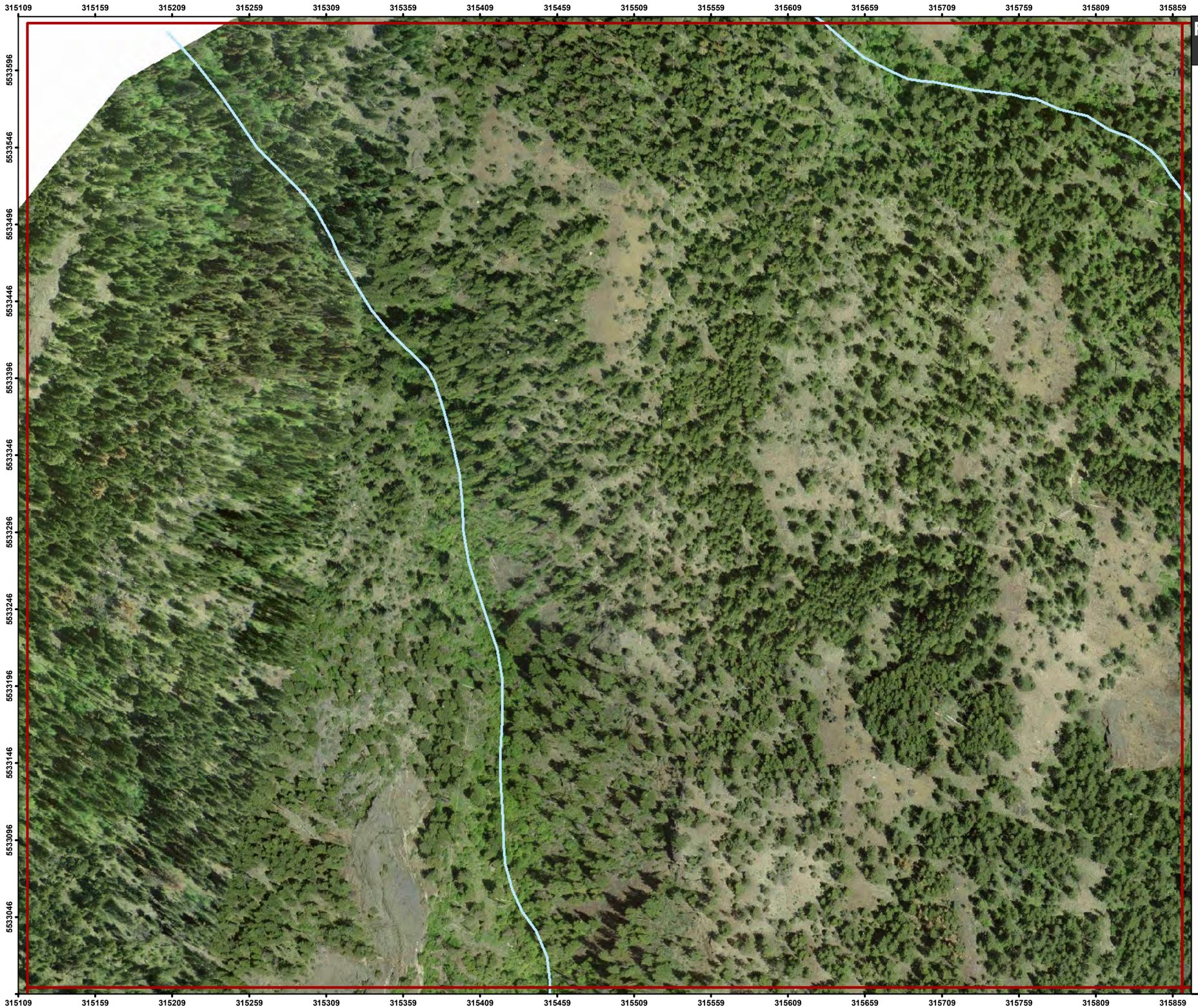
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 23

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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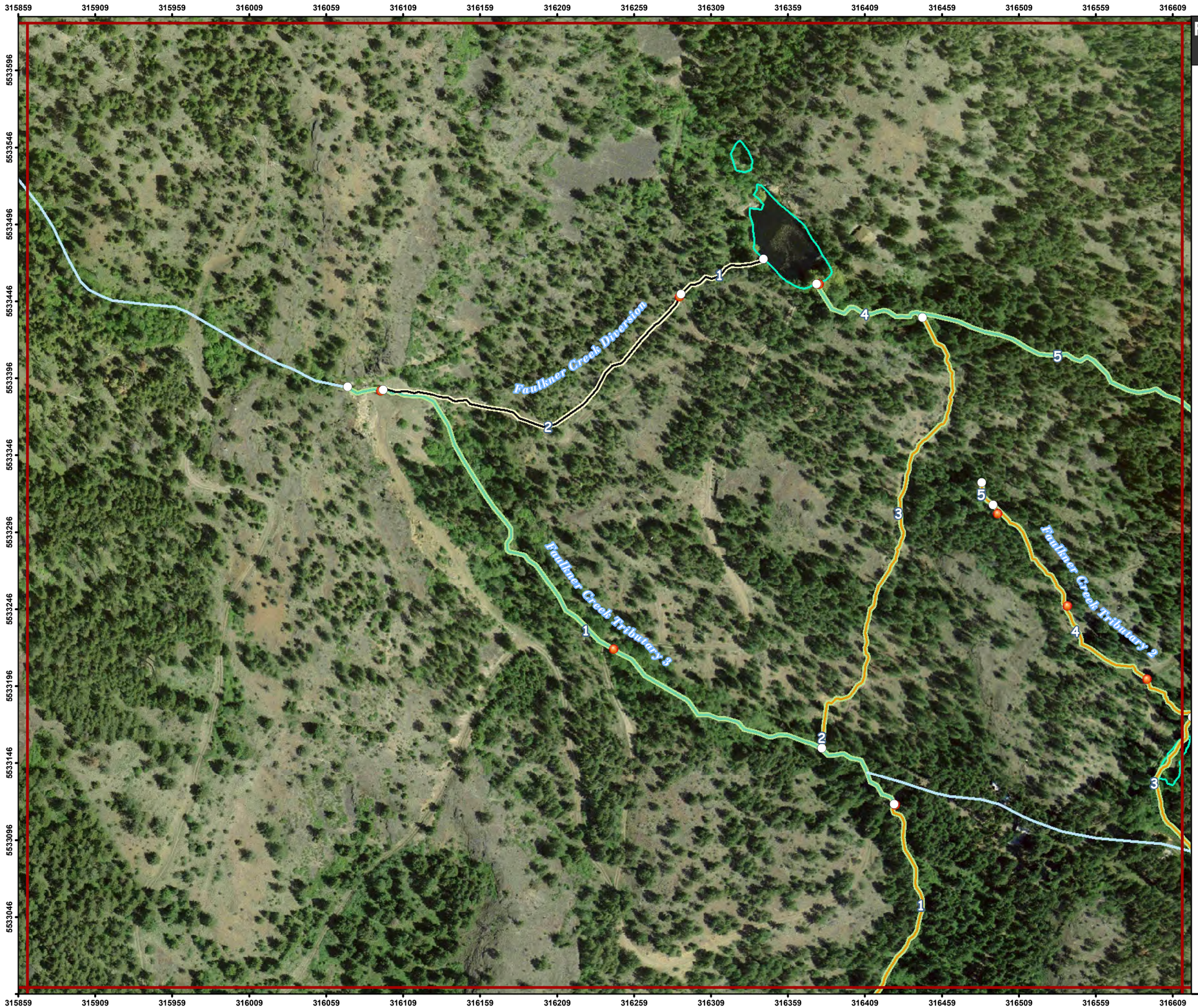
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 24

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Faulkner/Keefe Creek Drainage Impact and Habitat Rating - Mapsheet 25

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Faulkner Creek and Keefe Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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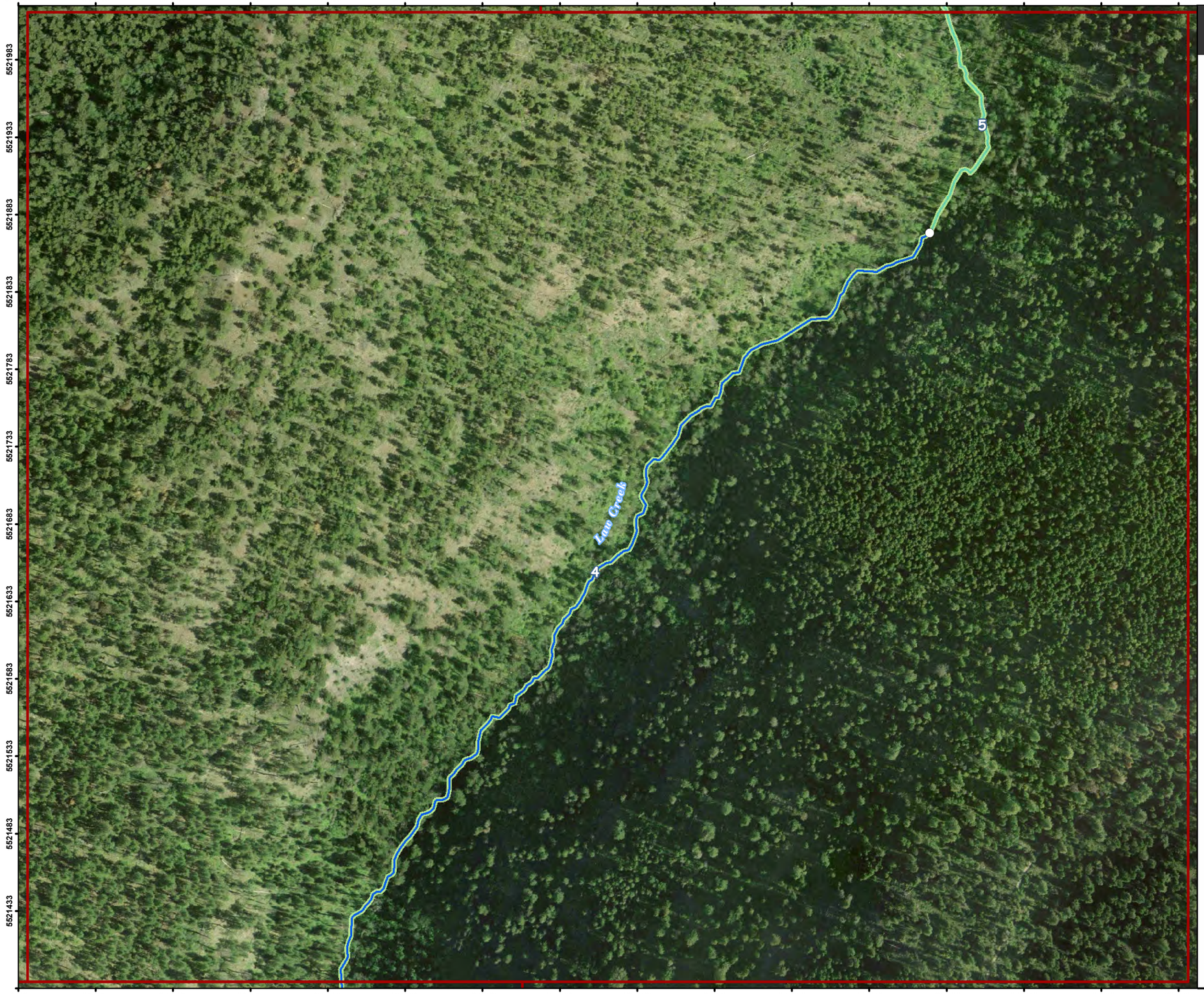
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Law Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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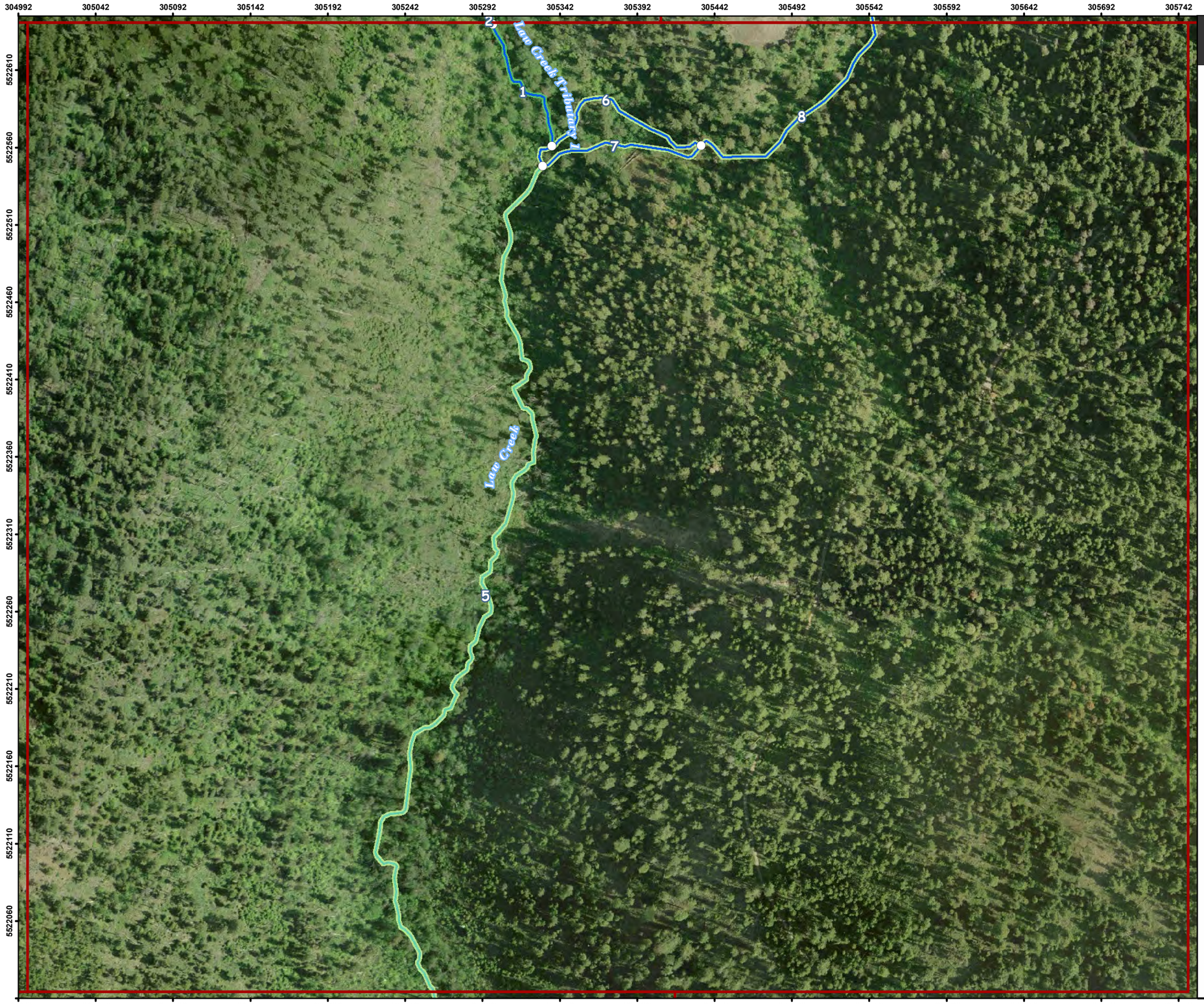
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Law Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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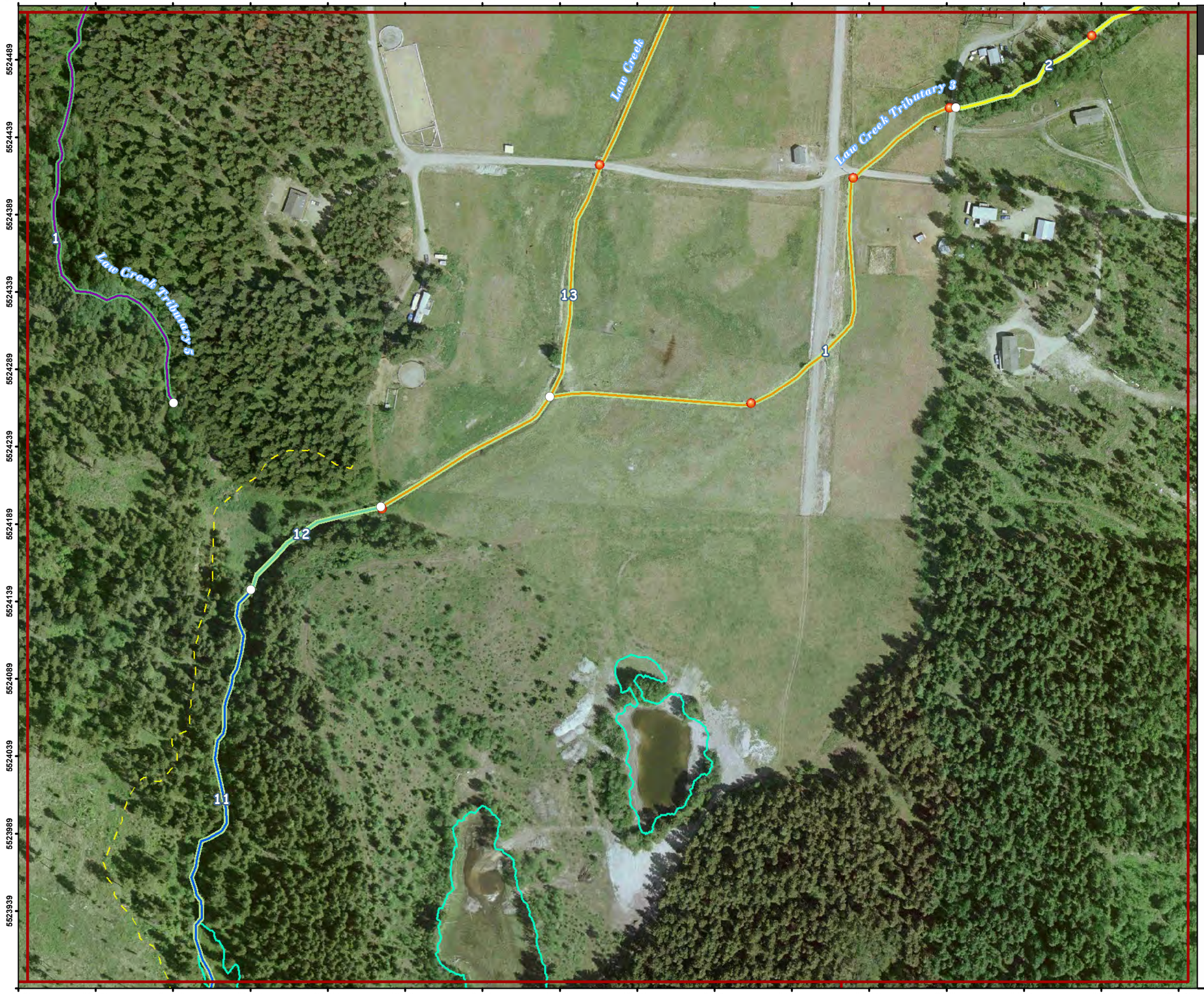
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Law Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 13

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 14

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 15

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 16

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 17

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

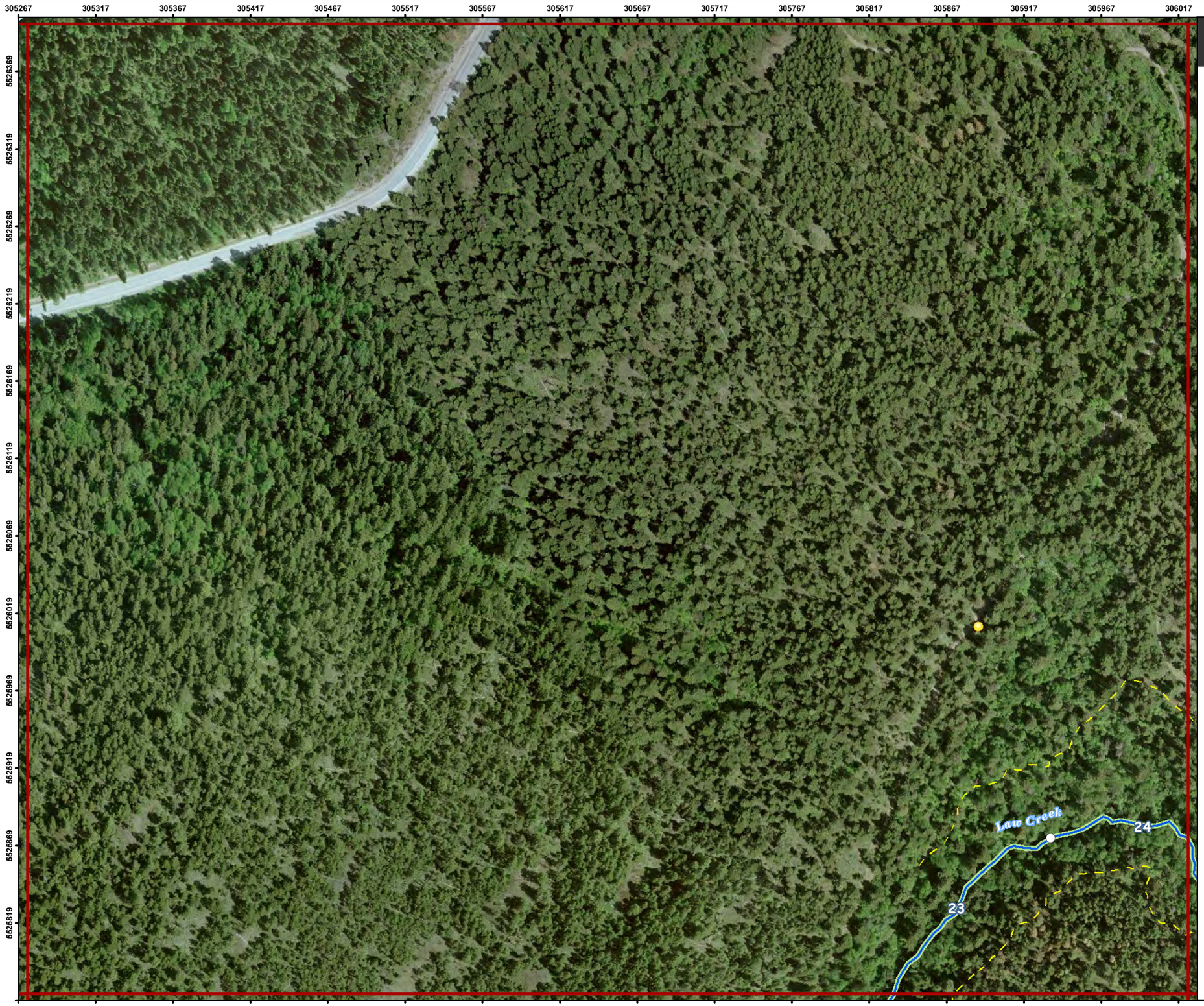
High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Law Creek Drainage Impact and Habitat Rating - Mapsheet 18

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Law Creek Drainage Impact and Habitat Rating - Mapsheet 19

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Law Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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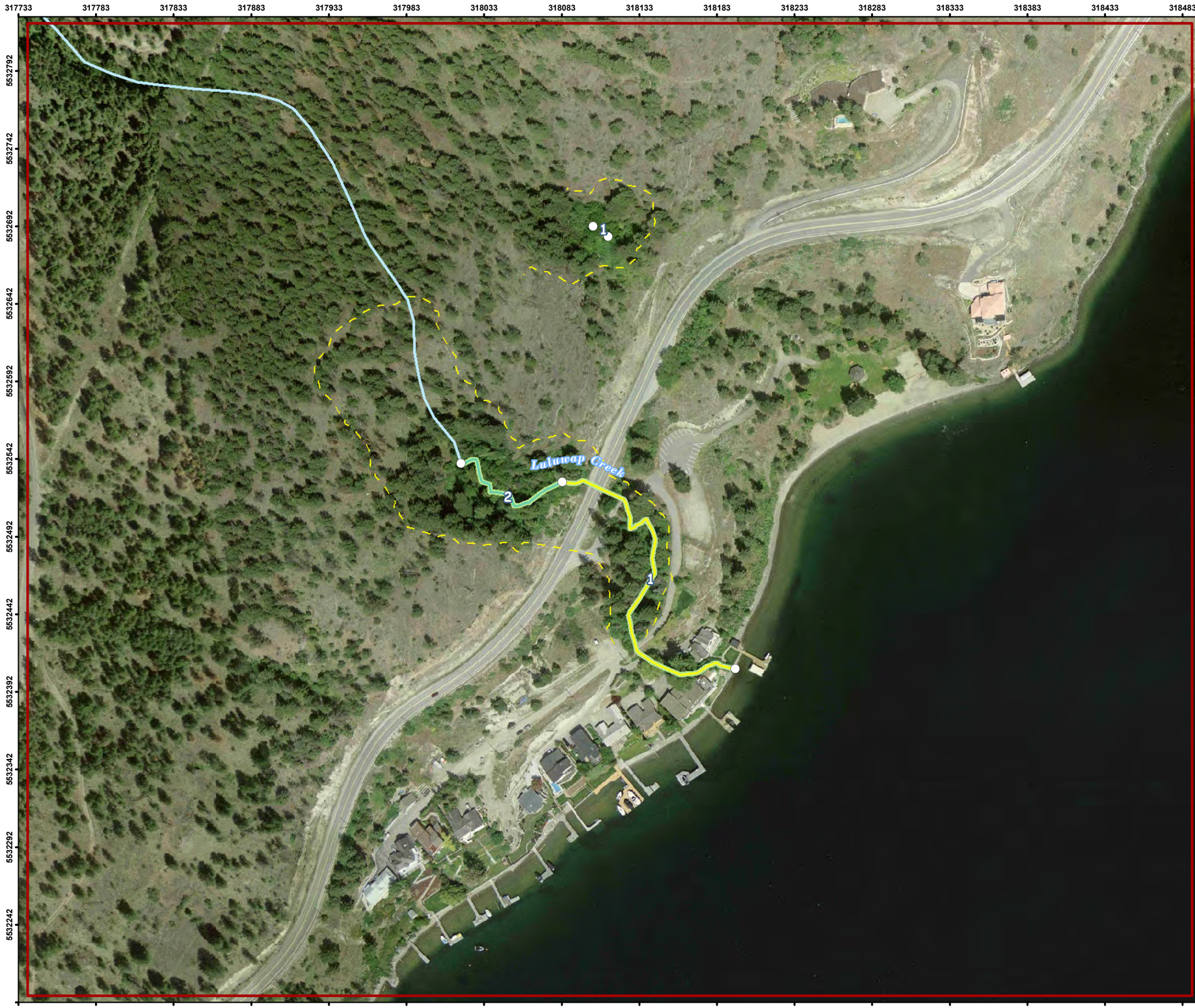
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Luluwap Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Luluwap Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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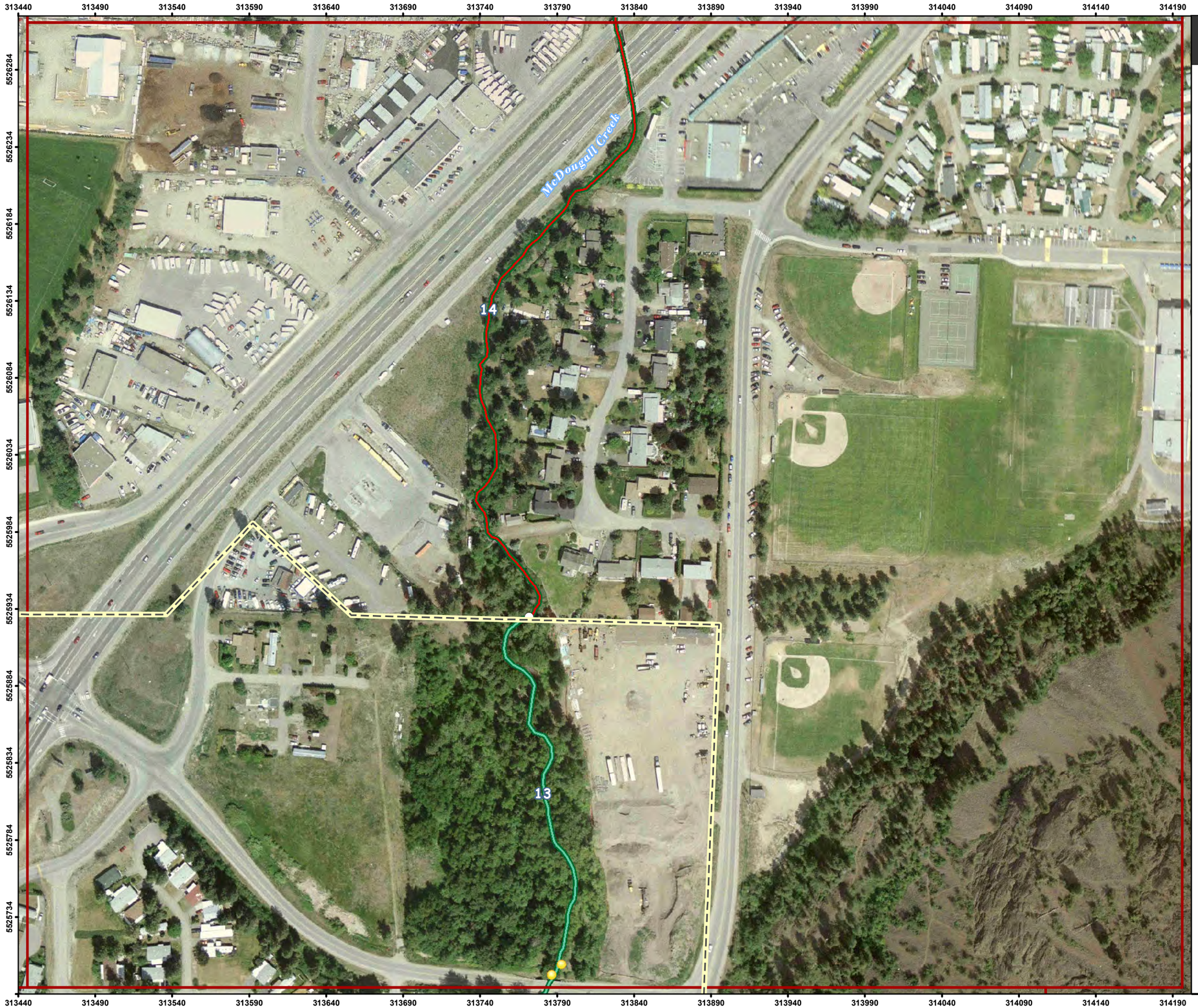
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 13

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
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Habitat Ratings

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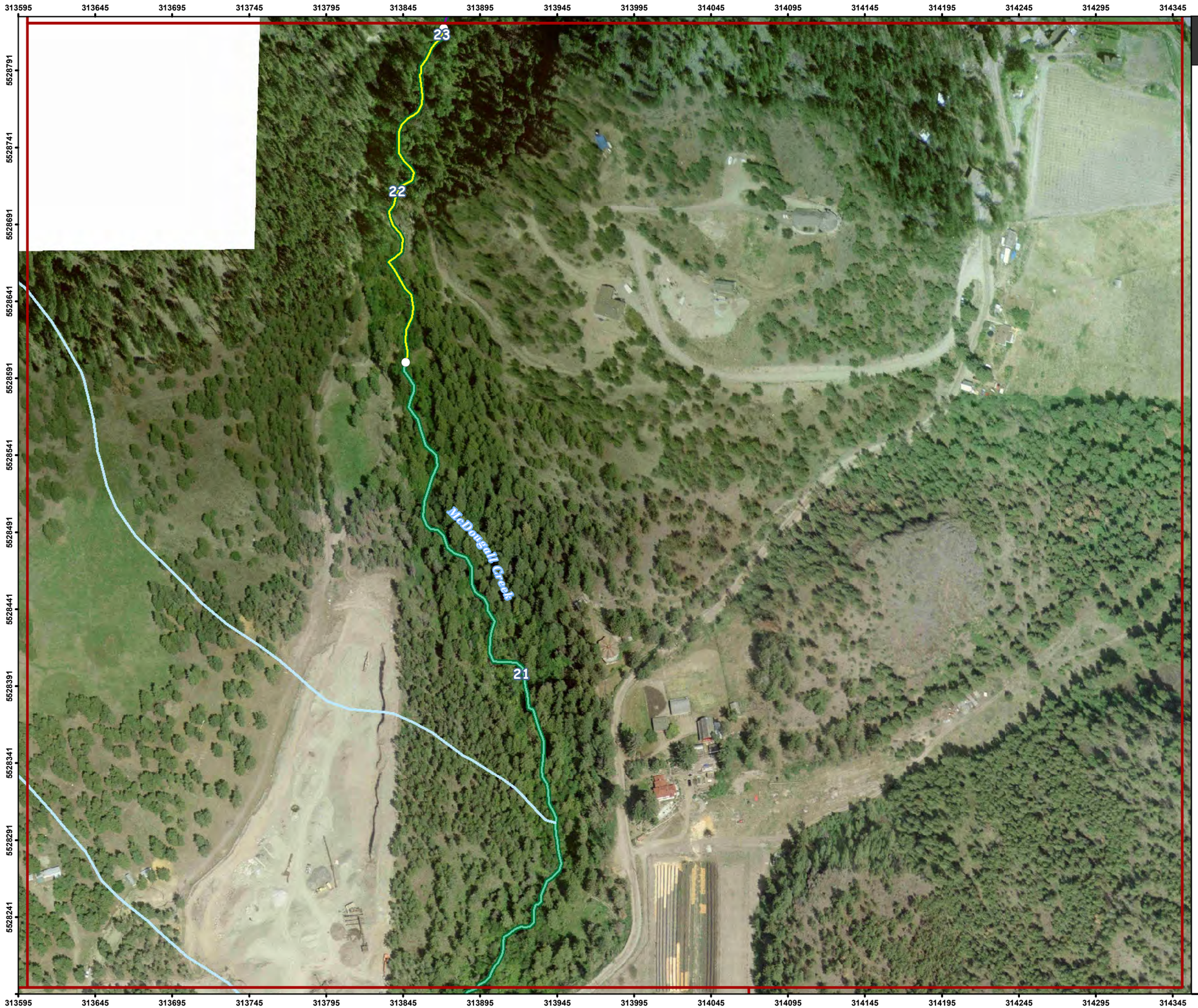
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 14

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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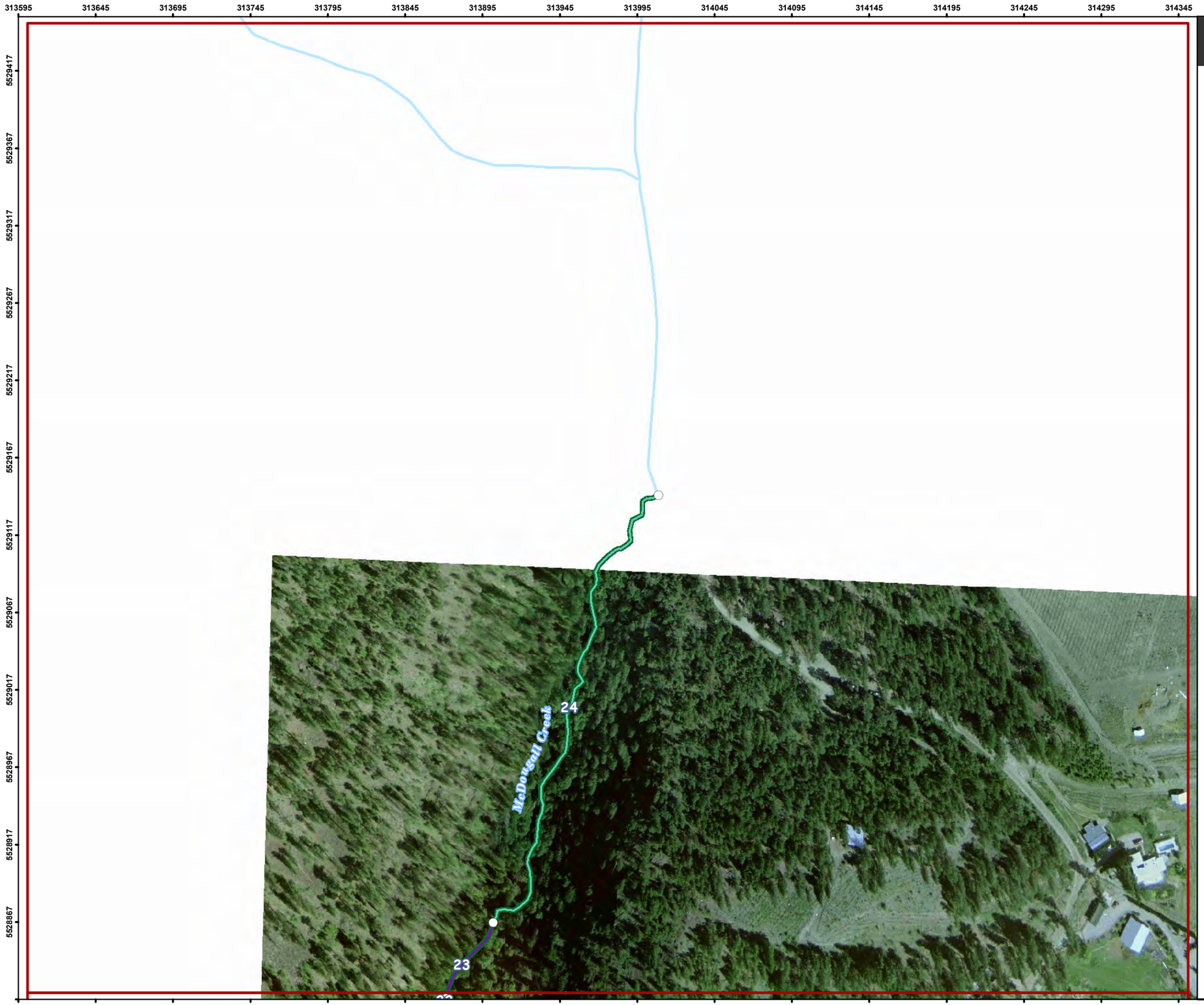
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



McDougall Creek Drainage Impact and Habitat Rating - Mapsheet 15

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	McDougall Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
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- 6 (Nil - Nil)

Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
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Habitat Ratings

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
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Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
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- Culvert
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- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

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Impact Rating Score (Bank - Bank)

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
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Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
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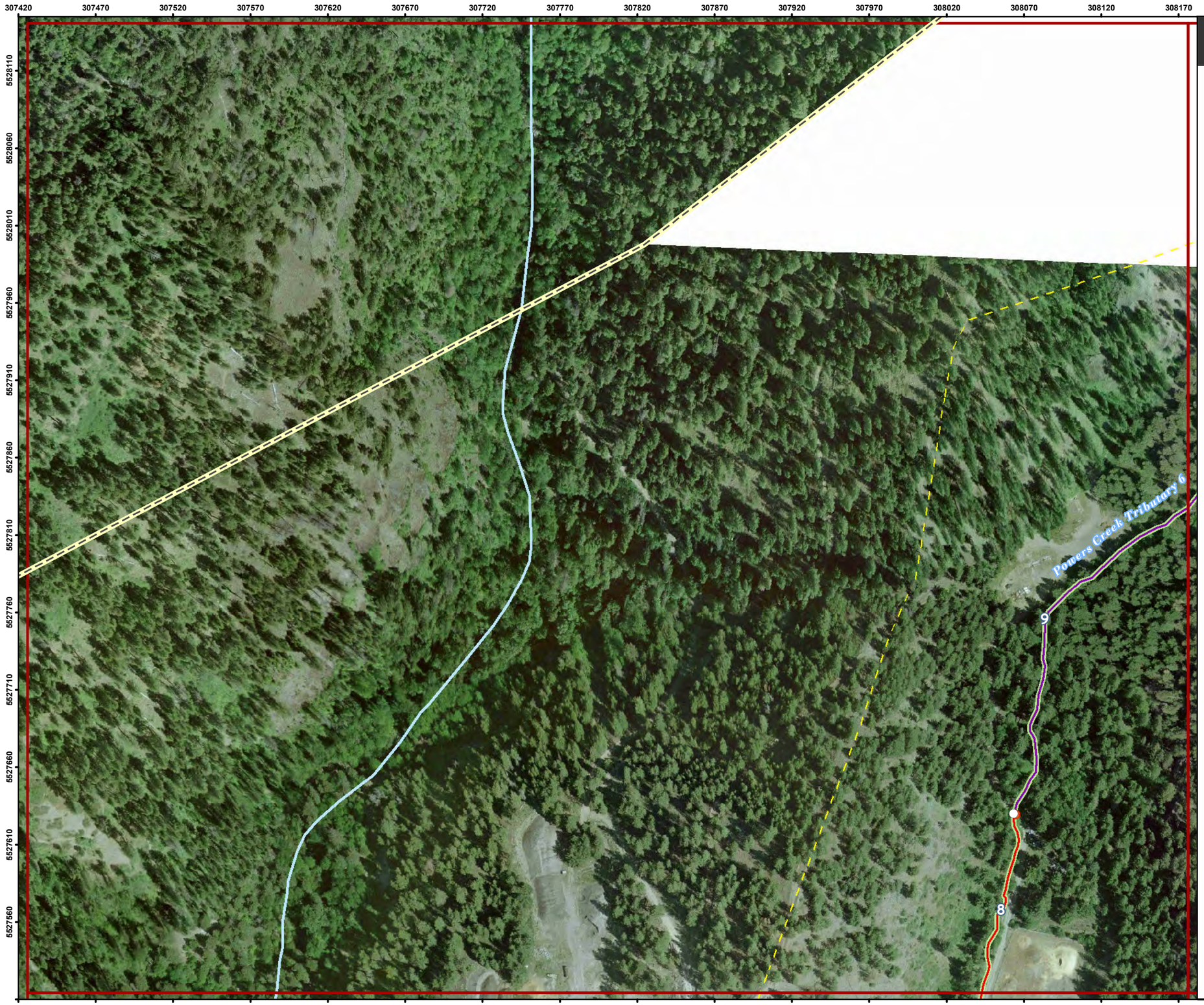
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Powers Creek Drainage Impact and Habitat Rating - Mapsheet 13

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
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Projection:	NAD83-UTM Zone 11
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SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

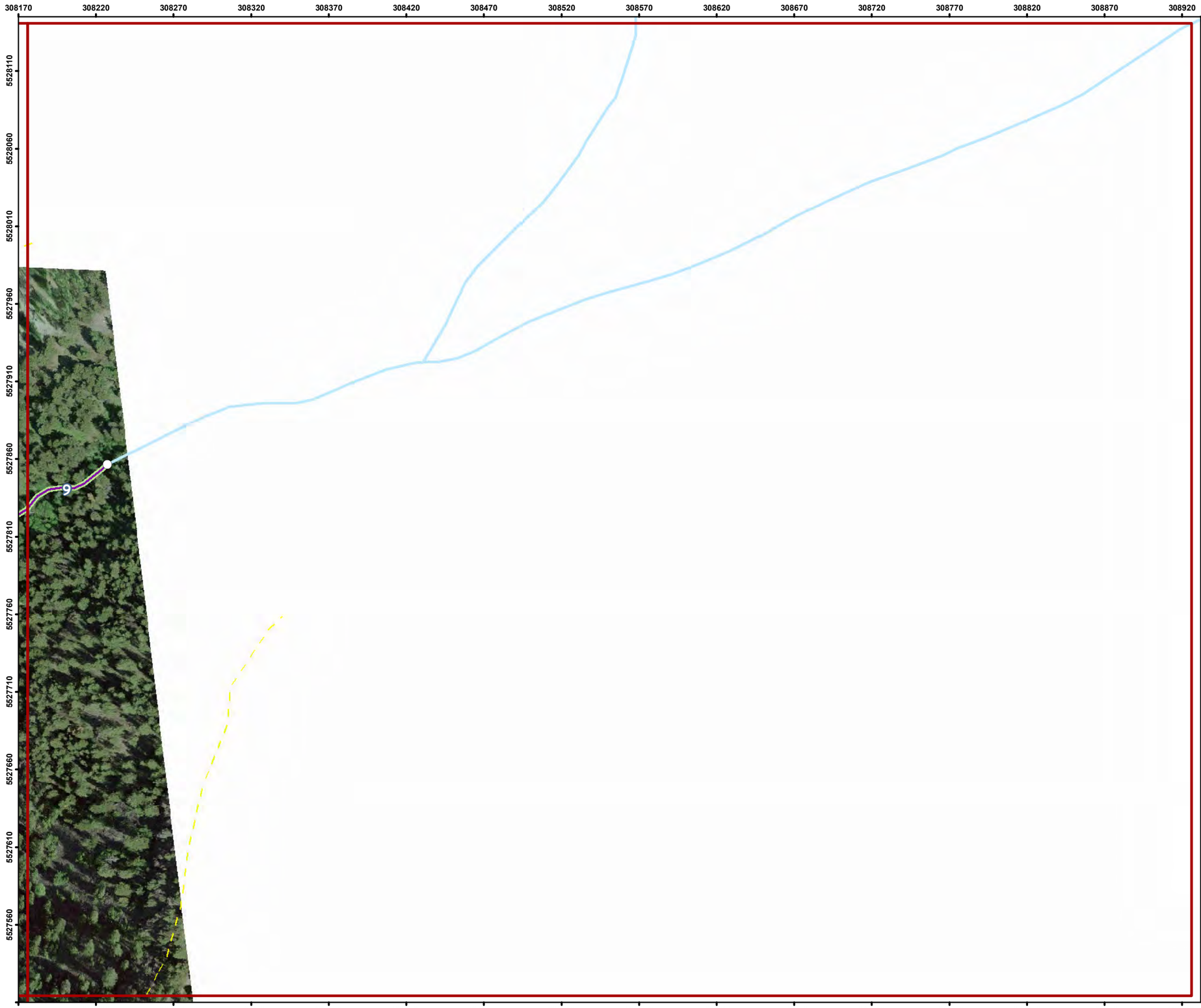
High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Powers Creek Drainage Impact and Habitat Rating - Mapsheet 14

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 15

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 16

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 17

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 18

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 19

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 20

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 21

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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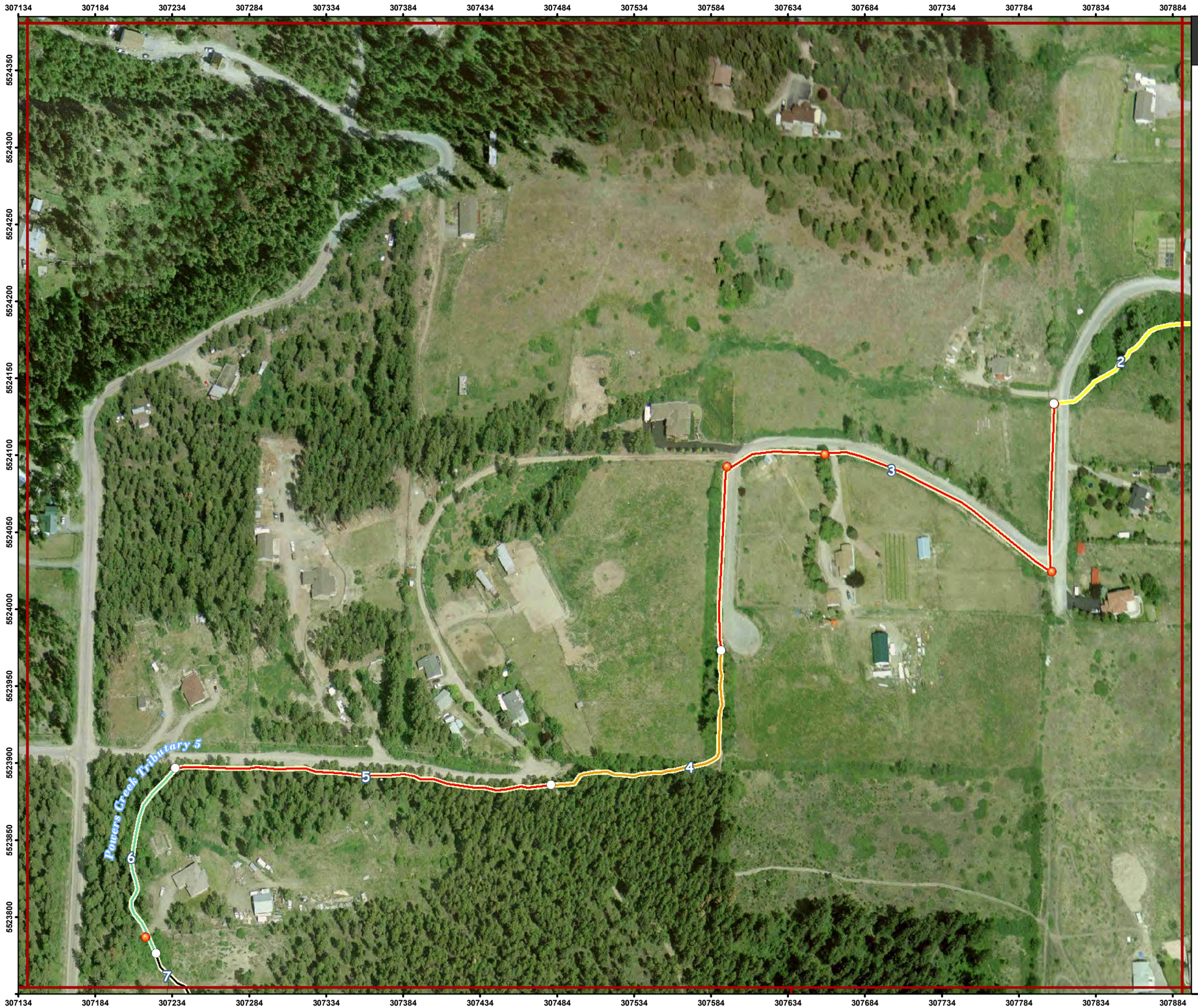
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Powers Creek Drainage Impact and Habitat Rating - Mapsheet 22

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 23

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 24

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 25

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 26

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 27

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Powers Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Powers Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 1

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 2

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 3

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 4

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 5

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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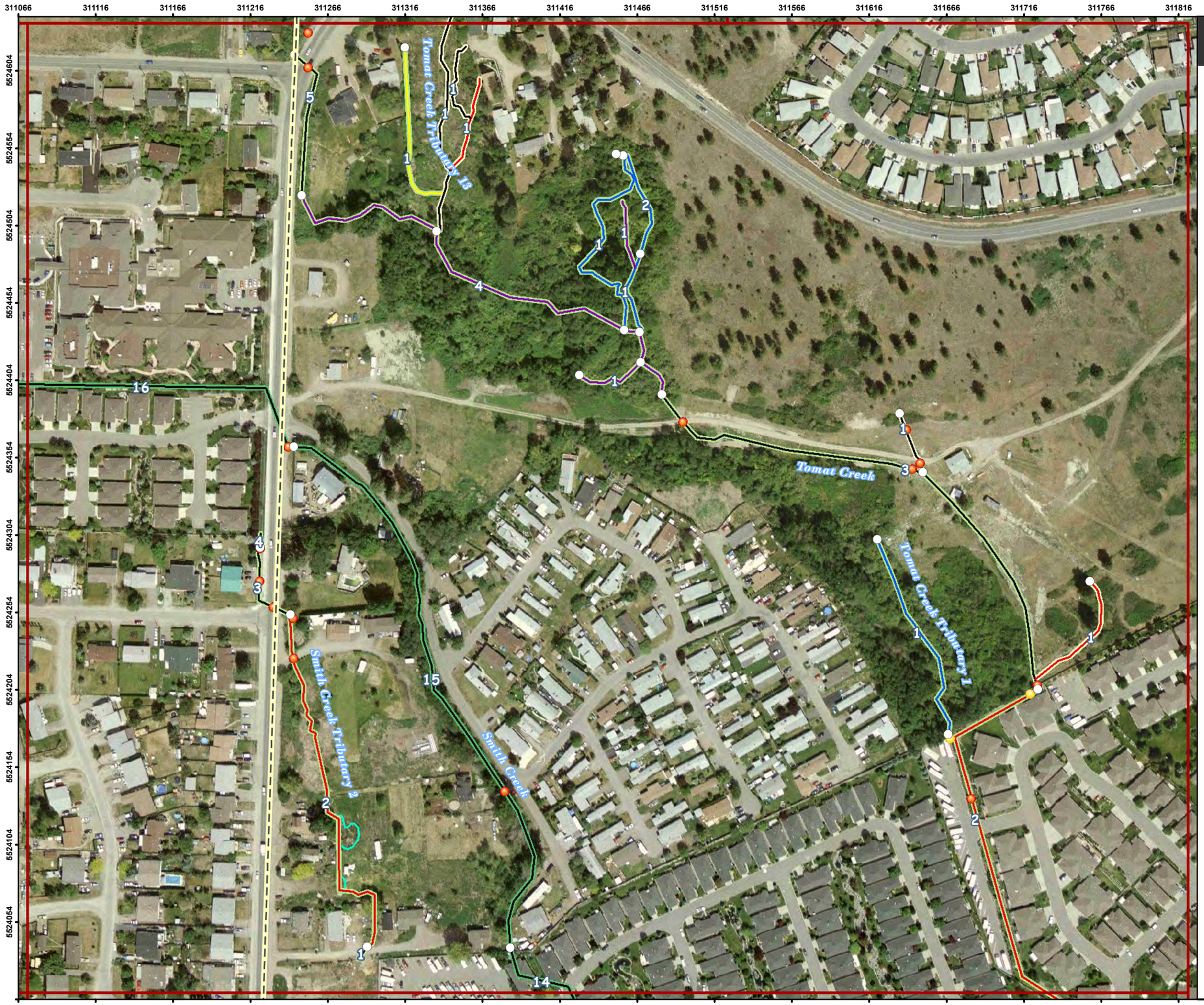
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 6

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 7

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 8

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 9

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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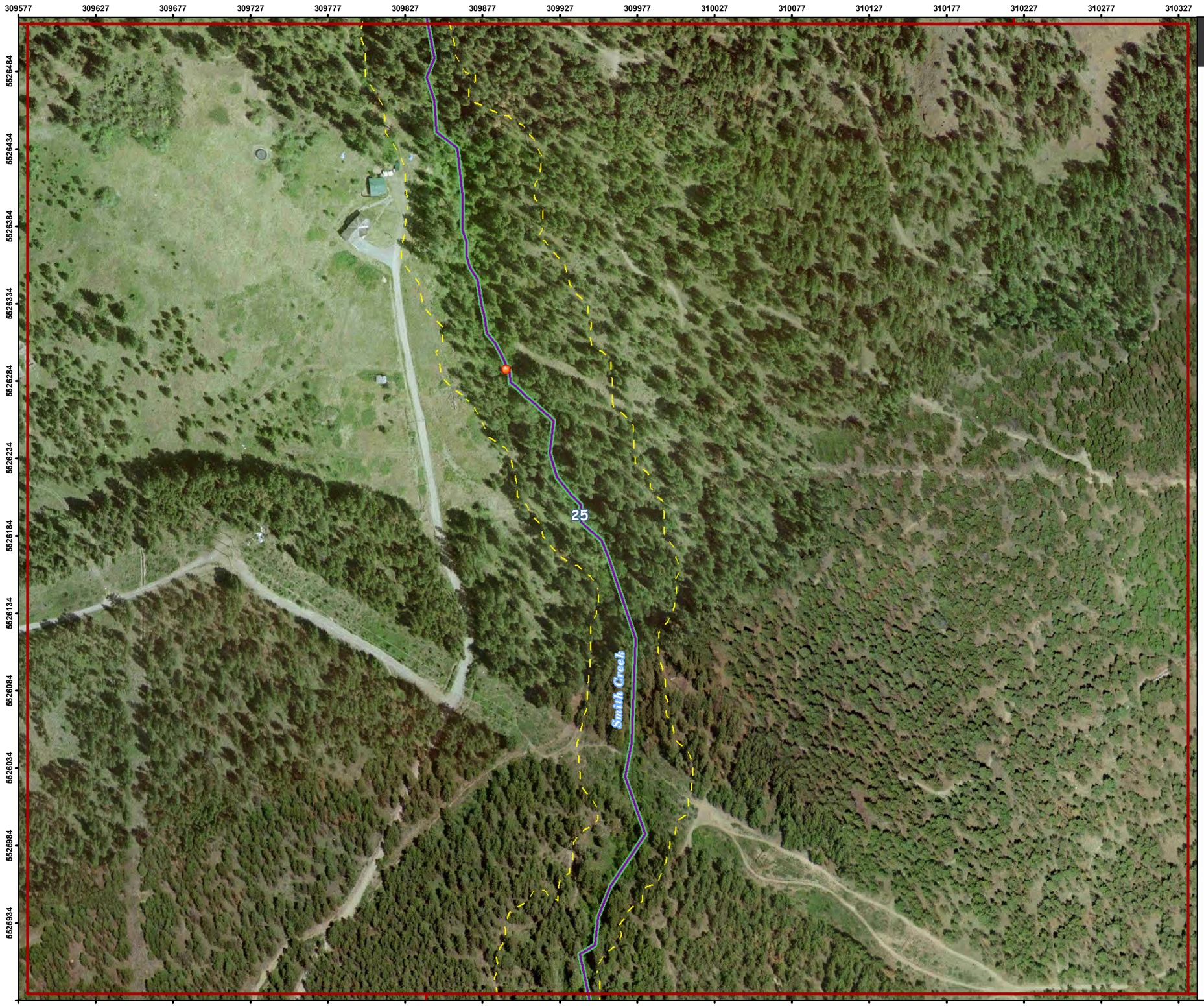
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 10

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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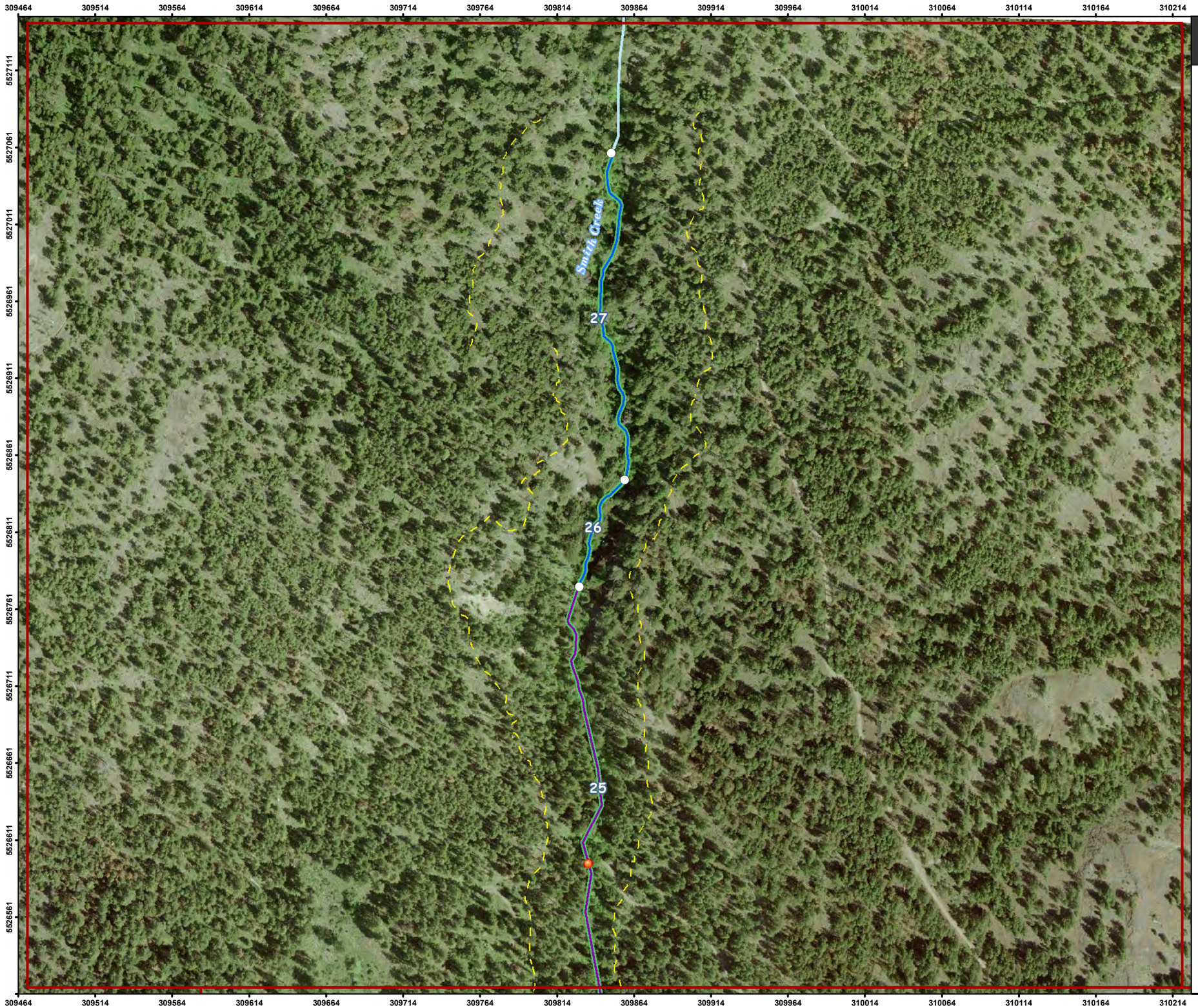
Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 11

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 12

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

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Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna

Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 13

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

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N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

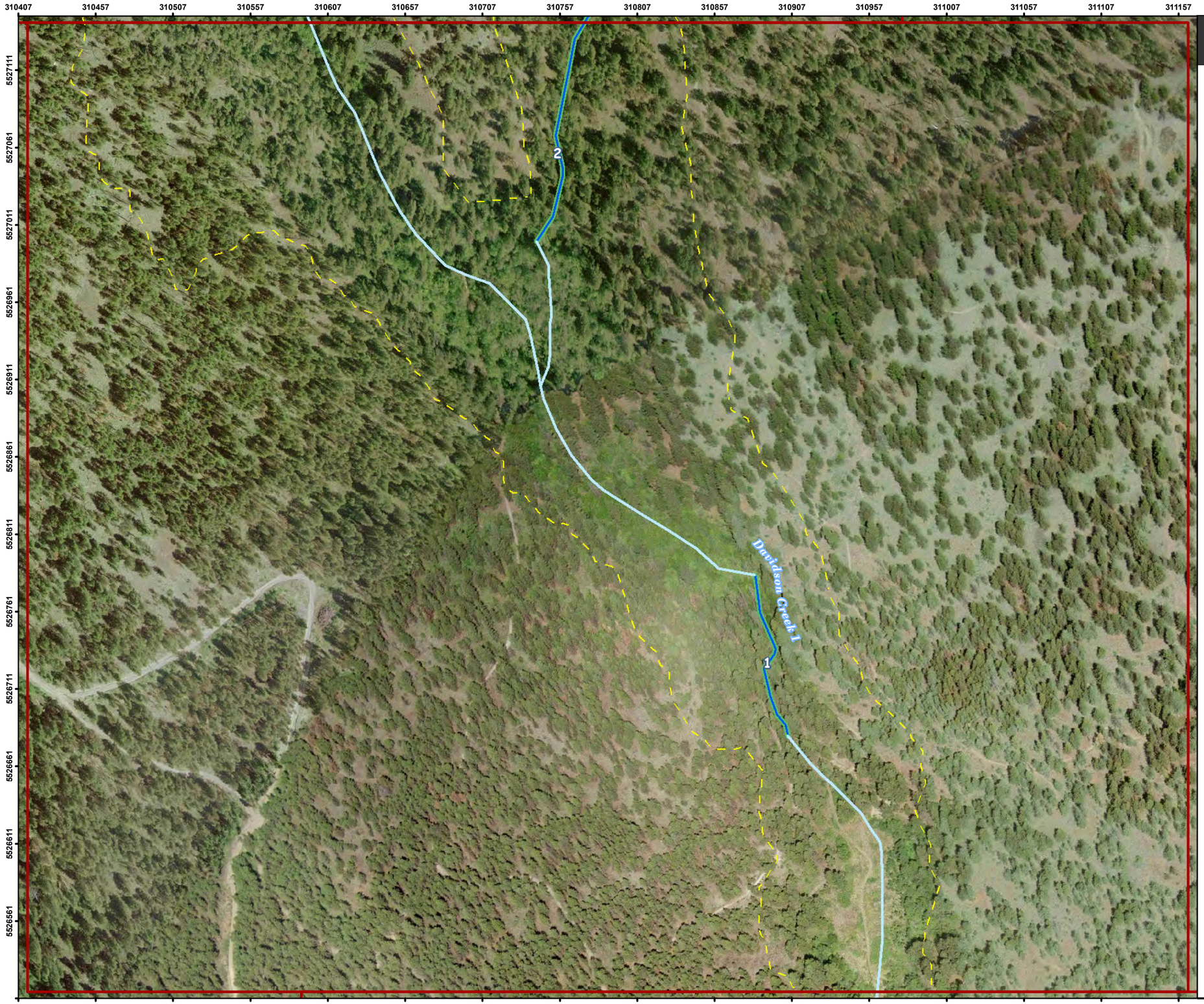
High Habitat Rating (0.51-0.75) was assigned to tributary systems with suitable spawning habitat and a moderate rearing potential for the fish species present. These systems typically have higher gradients (limiting the availability of higher quality spawning and production capacity) in conjunction with smaller catchment areas;

Moderate Habitat Rating (0.26-0.50) was assigned to tributary systems without suitable spawning habitat or having low rearing potential (e.g.. locations without deep pools, undercut banks, or stable debris, and with little or no suitably sized spawning gravels).

Low Habitat Rating (0-0.25) was assigned to ephemeral, intermittent and discontinuous watercourses/drainages.

ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 14

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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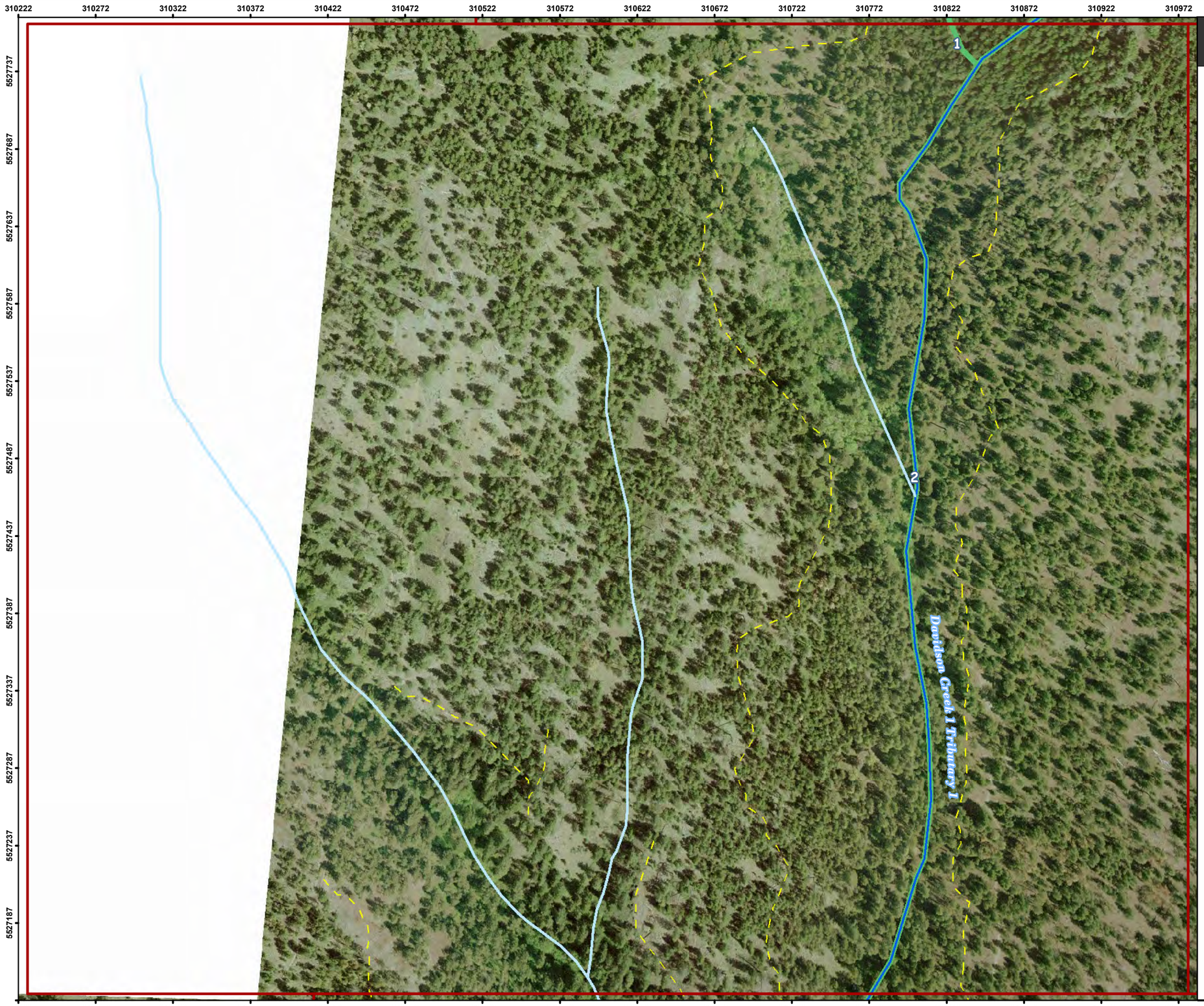
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 15

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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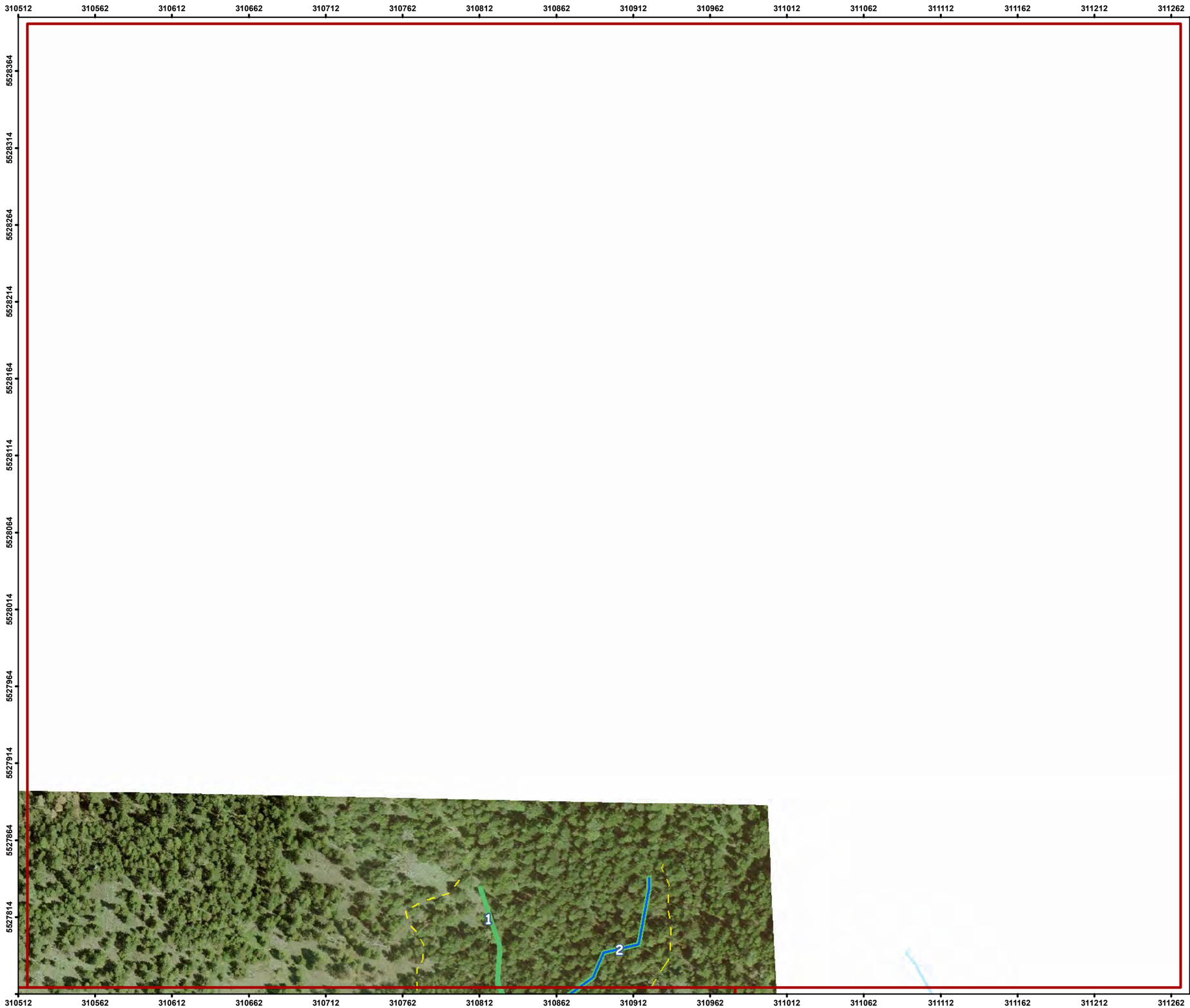
ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna



Smith/Tomat Creek Drainage Impact and Habitat Rating - Mapsheet 16

Project:	Sensitive Habitat Inventory and Mapping Update
Location:	District of West Kelowna
Project No.:	09-466
Prepared for:	District of West Kelowna
Prepared by:	Ecoscape Environmental Consultants Ltd.
Drawn by:	Robert Wagner
Checked by:	Danielle Drieschner
Projection:	NAD83-UTM Zone 11
Date:	July, 2010

Meters 20 10 0 20 40 60 80

1:2,500

N W E S

SOURCE INFORMATION

Base Map:	82E
Orthophoto:	Province of British Columbia
Waterbody Information:	Smith Creek and Tomat Creek Drainage
Location Information:	Field, GPS (Trimble GeoXT)
Feature Information:	Airphoto and Topographic Estimate Field Inventory (RDCO SHIM)
Date of Inventory:	2001-2003
Inventory Management:	Brent Magnan

LEGEND

- West Kelowna Boundary
- SHIM Segment Break
- TRIM Stream
- Top of Bank
- Culvert
- Discharge
- Water Quality Sampling Locations
- Lake/Wetland
- Properties with Opportunity for Enhancement

Habitat Rating

- Very High
- High
- Moderate
- Low

Impact Rating Score (Bank - Bank)

- 0 (High - High)
- 1 (Moderate - High)
- 2 (Moderate - Moderate or Low - High)
- 3 (Low - Moderate or Nil - High)
- 4 (Low - Low or Nil - Moderate)
- 5 (Nil - Low)
- 6 (Nil - Nil)

Habitat Ratings

Very High Habitat Rating (0.76-1.0) was assigned to tributary systems where high-value, critical spawning or rearing habitats were recorded (e.g., locations with abundance of suitably sized gravel, deep pools, undercut banks, stable large woody debris);

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ECOSCAPE Environmental Consultants Ltd.

District of West Kelowna