



WHY A CIP FACILITIES SURVEY?

Why?

 This is the first time we have collected some or all of this information for individual CIP facilities.



What it will inform:

- Will inform program planning and delivery, investments
- Legal requirements: used to populate a number of legal documents, including FMP, HMP.
- Linkages to other DFO databases (ie EPro).
- Broader program summary of information / statistics

CIP Survey Components



Data Capture elements

Data capture and management planning and reference documents that are produced will assist with the identification of specific needs to address the most pressing issues and priorities, in Pacific Region, in areas, and at specific sites.

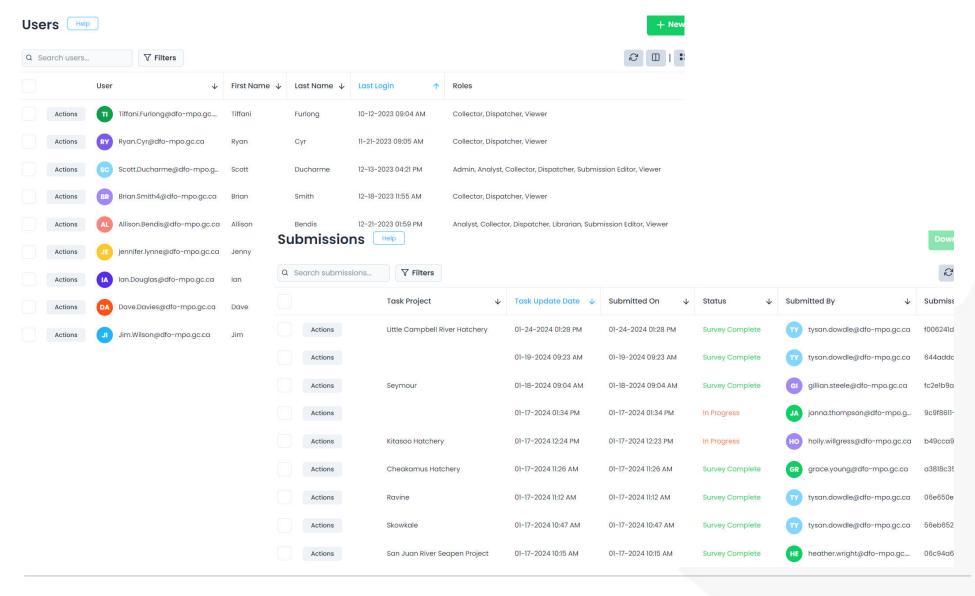
- Enhancement activities / Stock assessment
- Fish culture / Fish Health / Bio-security
- Human Resources / Health & Safety / Education and Training / Succession planning
- Infrastructure (Building, Fish Culture)
- Water supply licensing / treatment (CIP summary to come!)
- Climate Change resiliency
- Other Tenure, Insurance

CIP Survey

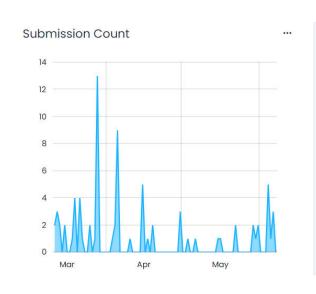
FastField

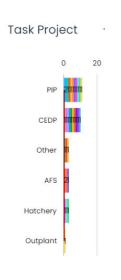
- Subscription service build your own "app"
- Ability to collect data on tablets without cellular or WIFI, but also work on desktop
- "Teams" of data collectors
- Ability to export in multiple formats > ultimate location in PSSI Digital lab team developed database / repository of information
- Report Template
- HDR/NHC data will also be used to populate

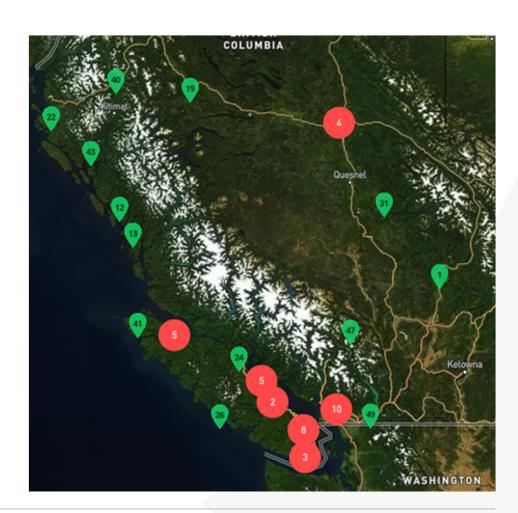
CIP Survey dispatch to teams



FastField - dashboard







Freshwater/Land-based Aquaculture 2024 Licence Renewal Process



Aquaculture Management is proposing changes to incorporate Facility Management Plans (FMP) and Fish Health Management Plans (HMP) into all Freshwater/Land-Based licenses.



These Plans have been a licensing requirement for all major licence amendments and all new licence applications since 2020.



As part of the Freshwater/Land-based Aquaculture 2024 Licence Renewal process, current licence holders were invited to provide feedback (by Oct 31, 2023) on new templates.



Approved Plans are expected to be attached to 2024 Pacific Aquaculture Regulation (PAR) licenses using a *phased-in* approach.

FRESHWATER / LAND-BASED AQUACULTURE LICENCE RENEWAL

Draft Timeline	Activity
Jun - Sep 2023	DFO to collect input on notable condition of licence proposed changes
Oct 2023	Industry to provide feedback on FMP and HMP templates by October 31, 2023
Sep - Nov 2023	DFO to draft licence conditions
Nov 2023 – Mar 2024	DFO to consult with First Nations on licence reissuance and licence conditions
May 2024	DFO decision-maker to make decisions on licence reissuance and licence conditions
Jun 2024	DFO to communicate decisions on licence reissuance and licence conditions

DFO TO REISSUE LICENCES: June 18, 2024

Facility Management Plan Components

Part 1 - Infrastructure

- Facility information
- Culture information
- Water sources and discharge
- Water treatment

Part 2 – Site Diagrams

- General location map
- Detailed location map
- Habitat map
- Operational diagrams

Facilities Management Plan (FMP)

Facility Management Plan for Freshwater/Land-based Facilities

This document is a template that, once completed, forms part of the Facility Management Plan (FMP) for your facility. Please review the FMP Guidance Document, complete the fields in the table below and submit the FMP to DFO_AGFW-AGFW MPO@dfs-mpo.gc.ca.

PART 1. Infrastructure

The FMP must specify infrastructure that lies within 30m of aquatic habitat and/or within the wetted perimeter of any waterbody. Drawings, diagrams, or annotated photographs must also be provided as per Part 2. Site Diagrams/Detail Drawings.

Facility Information
Facility Reference Number:
Facility Type: (e.g. Finfish, Shellfish, Grow-out, Hatchery)
racinty Type. (e.g. Firmsn, ariemsn, Grow-dut, Hatchery)

Buildings (Culture, F	Processing,	Storage, etc.) Purpose		Distance from Natura Water Body		
Containment			Indoor/Outdoor	Dis	stance from Natural	
				Waf	er Body (If outdoor)	
Tanks						
Raceways						
Isolated Ponds						
Connected Ponds						
Predator Netting						
Cages						
Water Source	I Volume	L ocation (a	engraphic coordinate	8)	Drawing/Diagram	
Water Source Type	Volume:	Location (g	eographic coordinate	8)	Drawing/Diagram Reference #(s)	
	Volume:	Lat: XX*XX.XXX	N Long: XXX°XX.XXX	xw		
Туре	Volume:	Lat: XX*XX.XXX		xw		
Type Groundwater-Fresh Groundwater- Brackish/Salt	Volume:	Lat: XX"XX.XXX Lat: XX"XX.XXX	N Long: XXX°XX.XXX N Long: XXX°XX.XXX	x w		
Type Groundwater-Fresh Groundwater- Brackish/Salt Municipal	Volume:	Lat: XX*XX.XXX	N Long: XXX°XX.XXX N Long: XXX°XX.XXX N Long: XXX°XX.XXX	X W		
Type Groundwater-Fresh Groundwater- Brackish/Salt Municipal Surface - Fresh	Volume:	Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX	N Long: XXX°XX.XXX N Long: XXX°XX.XXX N Long: XXX°XX.XXX N Long: XXX°XX.XXX	XW XW		
Type Groundwater-Fresh Groundwater- Broundwater- Broundwa	Volume:	Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX	N Long: XXX°XX.XXX N Long: XXX°XX.XXX N Long: XXX°XX.XXX	XW XW	Drawlng/Diagram Reference #(8)	
Type Groundwater-Fresh Groundwater- Broundwater- Broundwa		Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX	N Long: XXX"XX.XXX N Long: XXX"XX.XXX N Long: XXX"XX.XXX N Long: XXX"XX.XXX N Long: XXX"XX.XXX	X W X W X W X W	Reference #(s)	
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Type Groundwater-Fresh Groundwater- Brackish/Salt Municipal Surface - Fresh Surface - Marine Water Discharge Type Groundwater- Fresh		Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX	N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX ocgraphic coordinate N Long: XXX*XXXXXX	XW XW XW XW XW	Reference #(s)	
Type Groundwater-Fresh Groundwater- Brackish/Salt Municipal Surface - Fresh Surface - Marine Water Discharge Type		Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX Lat: XX*XX.XXX	N Long: XXX*XXXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXXX eographic coordinate	XW XW XW XW XW	Reference #(s)	
Type Groundwater-Fresh Groundwater- Brackish/Salt Municipal Surface - Fresh Surface - Marine Water Discharge Type Groundwater- Fresh		Lat: XX*XXXXXX Lat: XX*XXXXXX Lat: XX*XXXXXX Lat: XX*XXXXXX Lat: XX*XXXXXXX Lat: XX*XXXXXXXX Lat: XX*XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX N Long: XXX*XXXXX ocgraphic coordinate N Long: XXX*XXXXXX	XW XW XW XW XW XW	Reference #(s)	

Lat: XX°XX.XXX N Long: XXX°XX.XXXX W
Lat: XX°XX.XXX N Long: XXX°XX.XXXX W

Facility Management Plan, AQFW XXXX

Page 1 of 2

Effluent Water Treatment	
Description: (e.g. drum filtration, UV sterilization, dis	charge to surface through 30m discharge line. If
multiple treatment approaches are used, specify the p	ercentage of water treated using each approach.)
Primary: Removal of solid waste	
(e.g. settling ponds, screens)	
Secondary: Removal of solid waste and aeration	
(e.g. fine screening, mechanical aeration)	
Tertlary: Removal of nutrients, disinfection	
(e.g. UV treatment, ozone)	

Type and location: (e.g. 6 ft. chain link perimeter fence with vehicle gate and person door. ¼" mesh
screen on standpipe a	and at pipe outlet.)
Netting	
Screens	
Fencing	
Solid Walls	
Within Building	

Additional Information

PART 2. Habitat Map, Site Schematic Diagrams, and Detail Drawings

The FMP must include a habitat map, and site schematic. Detail drawings and/or annotated photographs are required for all infrastructure within the wetted perimeter of any water body. Everything must be named and dated with a convention that allows them to be easily referenced. (e.g. A site schematic for Bob's Trout might be BTSchematic-1,07-23.pdf).

Habitat map

The habitat map should have sufficient detail to identify the property boundary, including any aquatic habitat within or near the property, and any facility infrastructure within 30 m of that habitat. The map must include a legend, with north arrow, and a scale.

Site schematic diagram

The site schematic diagram should have sufficient detail (e.g. between stocks) and external (e.g. visitor entry, log water entry and exit locations, the water flow between a components, and securifylyredator control features.

I attest that this document and attachments (i.e. had applicable) are accurate and to a

Signature:

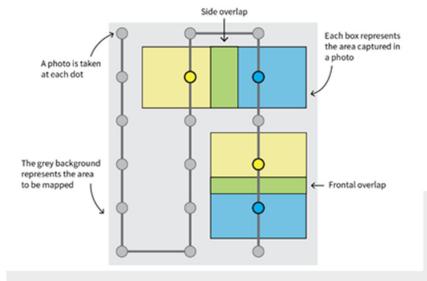
Date:

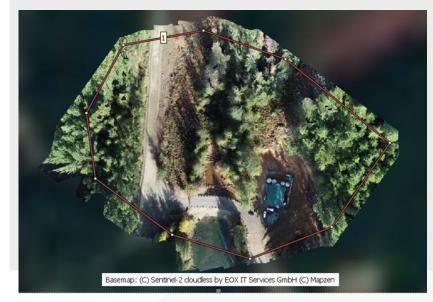
Anticipating
Ministerial Approval
for template on
June 10th

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Mapping process

- CIP map template design complete; developed using AMD, Real Properties and DFO GIS advice
- Using iMaps, OpenData BC, and local LIDAR data resources; drone imagery is being collected to provide current, high resolution base photos of facilities to meet detailed map criteria (as resources and opportunity allow)



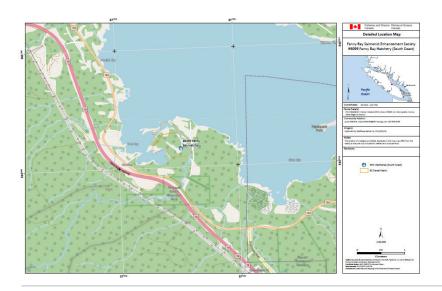


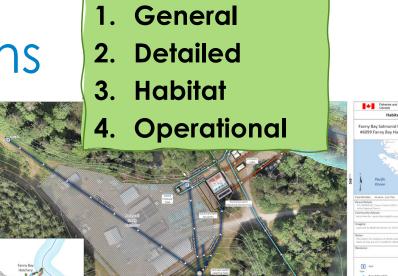
Mapping Contractor – Status

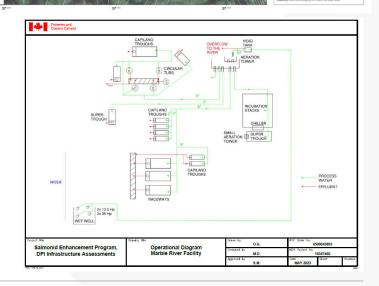
Area	■ Facility Name	City/DFO Area	Mapping Status 1	General Loc. Map	Detailed Loc. Map	Habitat Map 1 #	of Habitat Ma	Priority	✓ Operational Diagram ✓	Imagery ~	Hi Res DEM ~	CRM Comments	DFO Comments
South Coast	Fanny Bay Hatchery	Fanny Bay	Completed	Completed	Completed	Completed	2	High	Not Started	Hi Res	Available		-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
South Coast	Lake Cowichan Hatchery	South Vanc Island	In Progress	! Waiting Review !	! Waiting Review !	! Waiting Review !		High	Not Started	Low Res		Missing PID	
												Partial Lidar coverage available (not	
												covering hatchery area) - will use 25m	
				! Waiting Review !	! Waiting Review !	! Waiting Review !			Not Started	Medium Res		Trim for habitat contours. Well water	
												gets pumped into stream, which then	
South Coast	Mark Hobson Hatchery	South Vanc Island	In Progress				2	High				feeds the pond, correct?	
												Missing Fac CD #; Confirm PID - Hatchery	
												is not located in parcel (according to	
				! Waiting Review !	! Waiting Review !	! Waiting Review!			Not Started	Medium Res	Available	Fastfields); missing water intake gps	
												location; missing outflow info; missing	
South Coast	Nile Creek Hatchery	Courtenay-Comox	In Progress				1	High				pipe route	
South Coast	Oyster River Hatchery	Courtenay-Comox	In Progress	Completed	Completed	! Waiting Review !	1		Not Started	Medium Res	Available	Not in CRM scope	
												Habitat Map missing brood building GPS	
				! Waiting Review !	! Waiting Review !	I Waiting Review I			Not Started	Hi Res		location; outflow pipe info/location,	
				, violing herier ,	. Waiting Mexical	. Watting Nation			Not Started	1111102		contours. Should the satellite site be	
South Coast	Roy Creek Hatchery	acourtenay-Comox	In Progress				1	High				mapped?	
												1st draft done. Need GPS coordinates of	
												water intake/pond, header tank, and	
				! Waiting Review !	! Waiting Review !	! Waiting Review !			Not Started	Hi Res	Not Available		
												be mapped? Also no BCLidar coverage so	
South Coast	Zeballos Hatchery	Campbell River	In Progress				1	High				only TRIM 25m contours available	
South Coast	Cordy Creek Hatchery	Port McNeill	In Progress	Completed	Completed	Completed	2	High	Not Started	Hi Res	Available		Operational Diagram sketch mad by Don available
												No BC Lidar available - cannot create 2m	LiDAR from CVRD was provided,
				Completed	Completed	Completed			Not Started	Hi Res	Available	contours	imagery flown Oct 31 is loaded
South Coast	Trent River Hatchery	Courtenay-Comox	In Progress				1	High				Contours	sharepoint folder
South Coast	Cusheon Creek Hatchery	Saltspring Island	In Progress	In Progress	In Progress	In Progress		High	Not Started	Medium Res		Reexport maps with updated coords?	
												No BC Lidar available - cannot create 2m	
												contours. Could not map water source	
				In Progress	In Progress	Waiting for data			Not Started	Medium Res		pipes - insufficient data (need water	
												license info). New versions uploaded	
South Coast	Sonora Island Hatchery / Phillips Riv	ver Enl Campbell River	In Progress					High				2024-01-24.	
				In Progress	In Progress	In Progress			Not Started	Low Res		Some mapping done for previos project	
South Coast	Sooke River Jack Brooks Hatchery	South Vanc Island	In Progress					High				(Ian Douglas)	are on the same property
South Coast	Charters Creek Hatchery	Sooke	In Progress	In Progress	In Progress	Not Started		High	Not Started	Low Res		Hatchery is not visible from imagery	

Site maps / diagrams









Fish Health Management Plan (HMP)

Community Involvement Program

Best Management Practices Guide





- SEP Community
 Involvement no longer able to reference the Best Management Practices Guide for FMP in its entirety
- Will now need to identify specific fish culture activities undertaken at each facility; adopt SEP FHMP (content control)

First Edition: September 2013

HMP decision



CIP BMPs

- Last updated Fall 2013
- Needs to be reviewed and updated
- Better graphical design / layout; READABLE by Community Partners

SEP FHMP

- Existing template used by Major Ops
- Crafted and supported by Fish Health group

- Produce a document adopts SEP Major Ops FHMP templates
- Currently, CIP is using the SEP FHMP template as part of "new" enhancement applications. Fish Health Team is reviewing and updating this template.

Water Licensing

Water supply identified

 Survey data to collect water supply information

 Licencing, intakes, outfalls, effluent, amounts, water monitoring, associated costs



Groundwater - Well	Surface water - Lake	Surface water - Surface water - Spring		Municipal	Total
9	7	52	8		76

CIP Facilities database

PSSI Digital lab team to develop

- Centralized data management
- Ability to evaluate infrastructure
- Streamlined document population (ie PAR, FMP, HMP) – ie "mail merge"
- Linkages to other internal databases (ie EPro)
- Dashboard
- Ability to query information

Future focus

Operational Manuals - Develop site specific facility operation documents for CEDPs and larger PIPs initially, and other PIP facilities in the future

- Annual maintenance
- Seasonal operations
- Emergency protocol
- Emergency fish release
- Water supply system operation
- 55