

Vancouver Lake Watershed Partnership
Monitoring Activity Summary
Version 1.0 June 20, 2006

Background Information

Data gathering is an initial step in the process of developing lake improvement or management plans. Data is necessary for identifying lake problems and supplying alternative solutions that can be evaluated based on effectiveness and cost. Data gathering can be thought of in terms of major components, which may include biology (including habitat), hydrology/hydraulics, lake sediment quality, lake water quality, and watersheds. While a significant amount of data exists for the Vancouver Lake system, a little for each component, there is still a need to collect more in-depth and current data.

Specific data gaps have been identified by the Vancouver Lake Watershed Partnership (VLWP) that need to be addressed in order to perform analyses that are necessary for planning and developing management alternatives (see the Technical Group's question summary at <http://www.ci.vancouver.wa.us/PublicWorks/vancouverlake/Meetings/Question-Trends-VLWP-6-2-05.pdf>). Primary data gaps identified by the VLWP included describing water budget and movement in the lake; identifying pollutants and their sources; and describing the type, amount, and distribution of bacteria/pathogens, algae, plants, fish, wildlife, and exotic species.

A summary of ongoing and planned environmental monitoring activity for the Vancouver Lake/Lake River system, as well as for tributary sources, is crucial for leveraging resources and ensuring efficient, non-duplicative data gathering. There is a need to document, communicate, and coordinate these efforts as a whole.

Project Description

This project will compile and track information from projects collecting environmental data in the Vancouver Lake/Lake River region. This includes surface water and groundwater quality, sediment quality, hydrology/hydraulics studies (including climate data), and biological and habitat data. The geographic boundaries include Vancouver Lake and Lake River, tributary watersheds, and the Columbia River and floodplain waterways. While some of the monitoring locations may not influence the lake directly, study results may support the development of alternatives for lake improvements, for example, in Smith and Bybee Lakes or the Columbia Slough in Oregon.

The Clark County Water Resources program has contacted agencies, universities, and non-government organizations in the region requesting information for ongoing or planned environmental monitoring in the Vancouver Lake/Lake River region. Information provided about monitoring locations and studies are to be compiled and entered into the county's Geographic Information System (GIS). This format will allow information to easily be shared with other groups and organizations regardless of technical capabilities. Reports will be provided to the VLWP and sub-committees on a regular basis. Clark County Water Resources acts as the primary contact for this project and will maintain the data and communicate results via reports to the VLWP and subcommittees, as well as regional agencies. Current copies of the summary will likely be provided via the VLWP website.

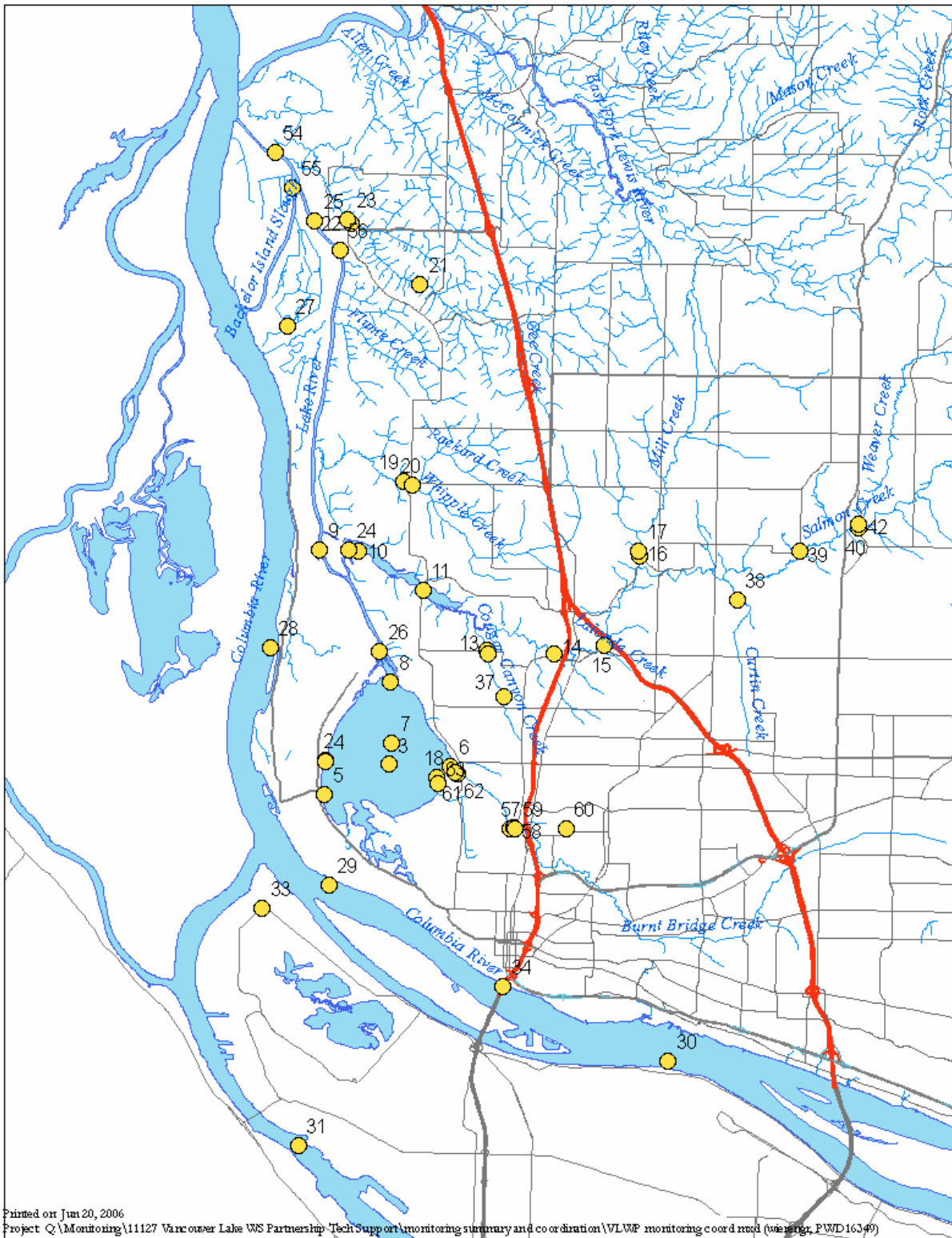
For more information about the content of this report contact:

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Attachment A. Map of monitoring stations compiled for this monitoring summary. Station ID numbers shown next to sample stations correspond to entries into the table below.

Table A. Monitoring station and study info for stations shown in map in Attachment A.

ID #	Station Name	Station Type	Study Name
2	Vancouver Lake at Park Beach Center	Lake/Pond/Res	Clark County Health Department Beach Monitoring
3	Vancouver Lake Main Station	Lake/Pond/Res	Volunteer Ambient Monitoring
4	Vancouver Lake	Lake/Pond/Res	Ecology Beach Monitoring
5	Flushing Channel	Lake/Pond/Res	Vancouver Lake PCB's and Chlorinated Pesticides
6	Burnt Bridge Creek	Lake/Pond/Res	Vancouver Lake PCB's and Chlorinated Pesticides
7	Lake Center	Lake/Pond/Res	Vancouver Lake PCB's and Chlorinated Pesticides
8	Outlet Channel	Lake/Pond/Res	Vancouver Lake PCB's and Chlorinated Pesticides
9	Lake River	Lake/Pond/Res	Vancouver Lake PCB's and Chlorinated Pesticides
10	Salmon Creek Treatment Plant Vancouver WA	Air/Climate	Clark County Hydrologic Monitoring Project
11	Salmon Cr at NW 36th Ave	Stream/River	Salmon Creek Monitoring Project
12	Cougar Cr at NW 119th St	Stream/River	Clark County Hydrologic Monitoring Project
13	Cougar Cr upstrm of NW 119th St	Stream/River	Long-term Index Site Project
14	Salmon Cr at KlineLine Park	Stream/River	Clark County Hydrologic Monitoring Project
15	Salmon Cr at Northcutt near Vancouver WA	Stream/River	Clark County Hydrologic Monitoring Project
16	Mill Cr upstrm of Salmon Cr Ave	Stream/River	Clark County Hydrologic Monitoring Project
17	Mill Cr upstrm of Salmon Cr Ave	Stream/River	Salmon Creek Monitoring Project
18	VanLake	Lake/Pond/Res	Vancouver Lake Lowlands Water Level Trends
19	Whipple Cr at NW 179th Street	Stream/River	Clark County Hydrologic Monitoring Project
20	Whipple Cr upstrm of NW 179th St	Stream/River	Long-term Index Site Project
21	Gee Cr dnstrm of Royle Road	Stream/River	Long-term Index Site Project
22	Gee Cr upstrm of Abrams Park Bridge	Stream/River	Volunteer Ambient Monitoring
23	Gee Cr at old Abrams Park bridge Ridgefield	Stream/River	Clark County Hydrologic Monitoring Project
24	Salmon Creek near mouth	Stream/River	Clark County Hydrologic Monitoring Project
25	Lake River at Ridgefield Marina	Stream/River	NFS contract work
26	Lake River at Felida Moorage	Stream/River	NFS contract work
27	Campbell Slough	Wetland	LCREP Ecosystem Monitoring Project
28	Columbia R at Marker #28	Stream/River	Unk
29	Columbia R at Marker #47	Stream/River	Ambient Monitoring Network
30	Columbia River at MJ Gleason ramp	Stream/River	Unk
31	Willamette R at RR Bridge	Stream/River	Unk
32	Willamette R at Hawthorne Br	Stream/River	Unk
33	Columbia Slough at Portland OR	Stream/River	Unk
34	Columbia R at Vancouver WA	Stream/River	Unk
35	Willamette R at Portland OR	Stream/River	Unk
36	Columbia R at Beaver Army Terminal	Stream/River	Unk
37	Cougar Cr at Columbia River H.S.	Stream/River	Long-term Index Site Project

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ID #	Agency Name	Agency Contact	Agency Phone	Study Type
2	Clark County Health Department	Marty McGinn	360-397-8215x7275	Water Quality
3	Clark County	Jason Wolf	360-397-6118x4282	Water Quality
4	Washington State Department of Ecology	Maggie Bell-McKinnon	360-407-6124	Water Quality
5	Washington State Department of Ecology	Randy Coots	360-407-6690	Sediment Quality
6	Washington State Department of Ecology	Randy Coots	360-407-6690	Sediment Quality
7	Washington State Department of Ecology	Randy Coots	360-407-6690	Sediment Quality
8	Washington State Department of Ecology	Randy Coots	360-407-6690	Sediment Quality
9	Washington State Department of Ecology	Randy Coots	360-407-6690	Sediment Quality
10	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
11	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
12	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
13	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
14	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
15	Clark Public Utilities	Steve Prather	360-992-8023	Hydrology/hydraulics
16	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
17	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
18	Clark Public Utilities	Steve Prather	360-992-8023	Hydrology/hydraulics
19	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
20	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
21	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
22	Clark County	Jason Wolf	360-397-8215x7275	Watersheds
23	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
24	Willamette Riverkeeper	Art Bass	503-223-6418	Watersheds
25	Willamette Riverkeeper	Art Bass	503-223-6418	Water Quality
26	Willamette Riverkeeper	Art Bass	503-223-6418	Water Quality
27	Lower Columbia River Estuary Partnership	Jill Leary	503-226-1565 x235	Biology/Habitat
28	Oregon Department of Environmental Quality	Steve Mrazik	503-229-5983x267	Water Quality
29	Oregon Department of Environmental Quality	Steve Mrazik	503-229-5983x267	Water Quality
30	Oregon Department of Environmental Quality	Steve Mrazik	503-229-5983x267	Water Quality
31	Oregon Department of Environmental Quality	Steve Mrazik	503-229-5983x267	Water Quality
32	Oregon Department of Environmental Quality	Steve Mrazik	503-229-5983x267	Water Quality
33	US Geological Survey	Unk	Unk	Hydrology/hydraulics
34	US Geological Survey	Unk	Unk	Hydrology/hydraulics
35	US Geological Survey	Unk	Unk	Hydrology/hydraulics
36	US Geological Survey	Unk	Unk	Hydrology/hydraulics
37	Clark County	Bob Hutton	360-397-6118x4282	Watersheds

Table A. Monitoring station and study info for stations shown in map in Attachment A.

ID #	Station Name	Station Type	Study Name
38	Curtin Cr at NE 139th St	Stream/River	Clark County Hydrologic Monitoring Project
39	Salmon Cr at NE 156th St	Stream/River	Clark County Hydrologic Monitoring Project
40	Salmon Cr at Capels Rd	Stream/River	Salmon Creek Monitoring Project
41	Salmon Cr at NE 199th St	Stream/River	Salmon Creek Monitoring Project
42	Woodin Cr at Caples Rd	Stream/River	Salmon Creek Monitoring Project
44	Salmon Cr near Battle Ground WA	Stream/River	Clark County Hydrologic Monitoring Project
53	Venersborg at NE 199th Street near Battle G	Air/Climate	Clark County Hydrologic Monitoring Project
54	Lake River	Stream/River	Pesticides, PCBs, and PAHs in Lo Col R Drainage
55	Lake River	Stream/River	WSPMP 1992 Pesticides in surface water
56	Lake R nr Ridgefield	Stream/River	Statewide River and Stream Ambient Monitoring
57	BURNT BR. CR.	Stream/River	Ecology's Freshwater Ambient Biological Assessment Program
58	Burnt Br Cr @ Mouth	Stream/River	Statewide River and Stream Ambient Monitoring
59	BURNT BRIDGE @ ALKI RD	Stream/River	Washington State Toxics Monitoring Program 2003
60	Ross Substation	Air/Climate	Climate Network
61	Mouth of BBC lake side	Stream/River	Clark County Health Department Beach Monitoring
62	North of BBC station	Lake/Pond/Res	Clark County Health Department Beach Monitoring
63	West of BBC station	Lake/Pond/Res	Clark County Health Department Beach Monitoring

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ID #	Agency Name	Agency Contact	Agency Phone	Study Type
38	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
39	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
40	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
41	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
42	Clark County	Bob Hutton	360-397-6118x4282	Watersheds
44	Clark Public Utilities	Steve Prather	360-992-8023	Hydrology/hydraulics
53	Clark County	Bob Hutton	360-397-6118x4282	Hydrology/hydraulics
54	Washington State Department of Ecology	Art Johnson	(360) 407-6766	Water Quality
55	Washington State Department of Ecology	Dale Davis	(360) 407-6972	Water Quality
56	Washington State Department of Ecology	Dave Hallock	(360) 407-6681	Water Quality
57	Washington State Department of Ecology	Chad Wiseman	360-407-6682	Watersheds
58	Washington State Department of Ecology	Dave Hallock	(360) 407-6681	Watersheds
59	Washington State Department of Ecology	Keith Seiders	(360) 407-6689	Watersheds
60	SW Washington Clean Air Agency	Jackie Brown	360-574-3058x15	Hydrology/hydraulics
61	Clark County Health Department	Marty McGinn	360-397-8215x7275	Water Quality
62	Clark County Health Department	Marty McGinn	360-397-8215x7275	Water Quality
63	Clark County Health Department	Marty McGinn	360-397-8215x7275	Water Quality