

**WHATCOM COUNTY  
PUBLIC WORKS DEPARTMENT**

**FRANK M. ABART  
Director**



**WATER RESOURCES**  
322 N. Commercial Street, Suite 210  
Bellingham, WA 98225  
Telephone: (360) 676-6692  
FAX: (360) 738-4561  
[www.whatcomcounty.us](http://www.whatcomcounty.us)

**MEMORANDUM**

**TO:** The Honorable Jack Louws, Whatcom County Executive, and  
Honorable Members of the Whatcom County Council

**THROUGH:** Frank M. Abart, Director

**FROM:** Gary S. Stoyka, Natural Resources Manager

**DATE:** April 21, 2014

**RE:** April 2014 Council Surface Water Work Session

Please refer to the proposed agenda below for the next Surface Water Work Session. Supporting documents will be distributed at or before the meeting.

**AGENDA**

<b>Date:</b>	Tuesday, April 29, 2014		
<b>Time:</b>	10:30 a.m. to 12:00 p.m.		
<b>Place:</b>	Civic Center Garden Level Conference Room		
Time	Topic	Council Action Requested	Background Information Attached
10:30 AM – 10:45 AM	Watershed Planning Update 1. Planning Unit 2. Joint Board 3. Coordinated Water System Plan	Discussion	None
10:45 AM – 11:30 AM	Staff report from Flood Control Zone District Advisory Committee discussion on 2014 work load allocations	Discussion	2014 Work Load Projections Spreadsheet
11:30 AM – 12:00 PM	Floodplains By Design Funding	Discussion	None

If you have questions, please feel free to call me at (360) 676-6876, extension 50618.

cc: Frank Abart      Joe Rutan      Paula Cooper      John Wolpers      Mike Donahue  
Mike McFarlane      Jeff Hegedus      John Thompson      Kraig Olason      Erika Douglas  
Remy McConnell      Josh Fleischmann      Karen Frakes      Martha Blakely      Jill Nixon  
Kirk Christensen      Dana Brown-Davis      Jennifer Paulson      Cathy Craver  
Roland Middleton      Lonni Cummings      Atina Casas      Mark Personius  
Sue Blake      George Boggs

2014 Work Load Projections

Project ID	Investment Name	Evaluation Score	Rank of Project	Status Notes	2014	PC	GG	BF	TB	LC	RZ	JT
07-002	Land and Easement Acquisition Program - for Flood and Habitat Restoration	79.6	2	Marietta acquisition under ESRP grant in 2013-14; HMGP grant in 2014; (Jones parcels under project 07-105)		0.05	0.05	0.05				
07-003	South Fork Nooksack CFHMP development	78.9	3	On hold due to no staff except for floodplain mapping under FEMA project 07-060								
07-004	Glacier/Gallup alluvial fan study	78.9	3	WSDOT has acquired highest risk property on the fan; no further work planned now due to staff limits								
07-006	North Fork CFHMP development	78.9	3	No staff to start until SF plan complete								
07-007	Middle Fork CFHMP development	78.9	3	No staff to start until SF plan complete								
07-010	Hydraulic modeling and alternatives analysis for Lower Nooksack	76.2	8	ESRP grant includes modeling of CFHMP recommendations within Reach 1 in 2013-14; upstream reaches starting after SWIF		0.10		0.25				0.20
07-133	Lower Canyon Creek Fish and Flood Project	74.7	14	Phase 1 constructed in 2010; Phase 2a constructed in 2013; Phase 2b planned for 2014		0.05	0.25	0.05				0.10
07-020	Update land and easement acquisition program development	73.8	18	No staff allocated								
10-001	Double Ditch-Pepin/Fishtrap Creek Watershed Restoration	73.6	19	City of Lynden is seeking funding								
07-022	Education and Public Involvement (would replace piecemeal efforts in all areas)	73.1	20	minimum staff time allocated; mostly in Birch Bay and WRIA1								
07-025	Meander limit identification and adoption for Lower Nooksack	72.8	22	On hold due to no staff allocated								
07-026	River Road overflow area and Nooksack River access	72.8	22	Final alternatives analysis and design can begin after SWIF (see project 07-010)								
07-030	Birch Bay Drive and Pedestrian (Shoreline Enhancement) Project (soft-shore protection)	72.1	25	Preliminary design underway;								
07-106	Deming area levee modifications (raise upstream end)	72.1	25	Design is underway for construction in 2015-16 (delayed by access issues)		0.05	0.10	0.10				
07-031	Develop/compile data and reports in response to requests (agencies and public)	71.8	29	Staff time only					0.05		0.10	
07-105	Jones Creek deflection berm and possible realignment of Turkington Road	70.6	32	Alternatives analysis for Turkington Road in 2013-14; berm and road design in 2014-15; no funding allocated for construction		0.05	0.15					
07-036	Early Flood Warning Program	69.9	35	USGS and NRCS contracts and access								
13-001	Swift Creek Sediment Management Action Plan (SCSMAP) Implementation	69.6	37	Plan and EIS completed; Joint Agency agreement executed; need Liability Consent Decree and funding; 2014 emergency project underway								
07-042	Coordination with outside agencies and community for fish/flood integration	68.7	39	Staff time only								0.20
07-044	National Flood Insurance Program (NFIP)	68.4	41	Staff time only					0.50		0.40	
07-047	Coordination with Roads on bridges and road/river problems and support on drainage	67.9	43	Staff time only			0.05					
07-050	Designate left bank overflow corridor between Guide-Meridian and I-5	67.7	45	Need to complete alternatives analysis and higher priority FHR projects first (see project 07-010)								
07-051	Left bank levee downstream of Ferndale	67.3	47	Some analysis under ESRP and SWIF								
07-054	Revegetation program	67.0	49	Includes one FCZD-funded jail crew, CD coordination and materials; grant ended in 2013								
07-059	Reach 3 overflow corridors	66.0	51	Modeling and survey work proposed as part of CFHMP update after SWIF								
07-060	Floodplain mapping for land use regulation	65.6	52	FEMA grant covered LNR and SF in detail, and approx study for NF and MF; all but LNR going thru official adoption process					0.05			
07-071	Adaptive Management	63.4	59	No staff allocated								
07-079	Modifications to Sande levee at Marietta Road area	62.6	64	Being evaluated as part of the Reach 4 analysis under the SWIF process								
07-081	Community Rating System	62.2	65	Direct costs for mailings public info, etc.						0.10		
07-083	Alluvial fan hazard, risk and emergency planning	62.1	66	No staff allocated at this time other than work on Jones, Canyon and Swift Creeks								
07-084	Glacier/Gallup Alluvial Fan - Property acquisition program for high hazard properties	61.9	69	WSDOT has acquired highest risk property on the fan; no further work planned now due to staff limits								
07-091	Volcanic Hazard, Risk and Emergency Planning	61.2	73	Minimal staff timed to assist emergency plan update								
07-104	Treatment plant and Ferndale south of Main St	60.5	76	Being evaluated as part of SWIF and CFHMP update								
08-003	Repair and maintenance projects for levee/bank damages from new flood events	60.5	76	Includes immediate recovery projects on river and projects on smaller drainages often done with Roads								
07-108	Pre-flood planning	60.4	88	Staff time not allocated specifically to this task								

2014 Work Load Projections

Project ID	Investment Name	Evaluation Score	Rank of Project	Status Notes	2014	PC	GG	BF	TB	LC	RZ	JT
08-023	Swift Creek Interim Flood Control Works	60.2	89	Significant 2014 bank stabilization project needed to prevent avulsion to Breckinridge Creek		0.05	0.30		0.05			
07-121	Roadway overflow sections	58.0	100	Need to complete alternatives analysis and higher priority FHR projects first (see project 07-010)								
07-123	Technical support to special districts and public	57.5	103	Staff time only			0.05	0.05	0.20		0.40	
07-125	High Creek management and funding plan	57.1	104	Consultant retained to complete plan in 2014		0.05						0.20
12-003	PL 84-99 Levee Eligibility - SWIF process that leads to projects that balance fish and flood interests	56.3	108	SWIF process underway in 2014 through first half of 2015		0.30		0.50	0.10			0.05
07-135	Canyon Creek hazard monitoring and warning system(s)	55.4	113	Not planned at this time								
07-136	Jones Creek hazard monitoring and warning systems	55.4	113	Early warning stage gage M&O proposed to be funded by AVZ subzone starting in 2012								
07-137	Swift Creek landslide monitoring and risk assessment	55.4	113	Funding for cameras on slide (DOE grant ended)								
13-002c	Syre-Maberry Property Erosion - ELJs	53.2	120	Alternative evaluated by consultant								
07-147	County Flood Response and Damage Recovery Program	52.9	121	Budget for response for one flood event						0.10		
07-148	Setback levee on right bank downstream of Ferndale	52.7	123	Alternatives analysis being done under ESRP grant (see project 07-010)								
07-152	Pt Roberts floodplain mapping	52.6	124	FEMA is initiating CTP project to remap all of Whatcom County coasts								
07-166	Buyout/flood proof area between the bridges in Ferndale	48.6	138	Need to complete alternatives analysis and higher priority FHR projects first (see project 07-010)								
07-170	Fishtrap Creek levee lowering and possible setback	48.3	139	Hydraulic design is complete; parked pending funding availability; may be options under project 10-001								
13-002b	Syre-Maberry Property Erosion - LDW revetment	47.4	141	Alternative evaluated by consultant								
12-001	Scott Ditch confluence repair	47.1	142	Second highest R&M project but no resources to implement at this time								
07-173	Comprehensive Drainage Response	46.9	143	Little staff time allocated								
13-002d	Syre-Maberry Property Erosion - LWD on Top of Bank	45.9	151	Alternative identified as pilot approach								
07-191	Main stem Nooksack River Piling Jams (Harksell Rd levee could be one site)	44.9	156	Harksell Road project was prioritized high by FCZDAC for a LWD project; no staff time								
07-195	Retrofit and maintain Twin View levee for overtopping	44.2	159	Need to complete alternatives analysis and higher priority FHR projects first								
07-207	Repair and Maintenance Program Administration	42.7	165	Staff time only			0.05					
07-218	Rehabilitate culverts at Lummi River diversion	41.7	170	Will be evaluated as part of ESRP grant (see project 07-010)								
07-220	Lake Samish Detention Structure Maintenance and Replacement	41.5	172	Maintenance funded through Lake Samish subzone; staff time out of NR budget								0.10
07-224	Reach 4 right bank avulsion protection	41.2	173	Need to complete alternatives analysis and higher priority FHR projects first (see project 07-010)								
07-231	Revise funding mechanisms for DD#2, DID #5, DID #6, CDID #20 and CDID #21	40.0	176	Staff time only; DD#2, DID#6, CDID #20 complete; DID #5 and CDID #21 hearings in 2014					0.05		0.10	
07-238	Administrative support for special districts (includes FCZD AC)	38.3	181	Staff time only		0.10				0.60		
07-245	Flood Code revision	37.2	189	County Council placed on hold indefinitely								
13-002a	Syre-Maberry Property Erosion - Riprap repair	35.9	197	Alternative evaluated by consultant								
07-265	Sediment Management Strategy Development	33.3	202	Pilot project developed and permitting feedback received; pursuing USGS cooperative study								
07-268	Nugents Corner levee modifications	31.0	206	Need to complete alternatives analysis and higher priority FHR projects first (see project 07-010)								
07-274	Glacier/Gallup interim levee/revetment structure	16.3	210	Left bank levee on Glacier got unacceptable rating for PL 84-99; no local sponsor - address in SWIF								
14-001	General program administration and staff support	N/A	N/A	Ongoing		0.20				0.20		
						1.00	1.00	1.00	1.00	1.00	1.00	0.85
						Assumptions: Marietta demo in 2015 for HMGP Allocation likely inadequate						