

BIRCH BAY ACTION PLAN LOW IMPACT DEVELOPMENT (LID) DESIGN WORKSHOP

HOSTED BY

WHATCOM COUNTY PLANNING AND DEVELOPMENT – NATURAL RESOURCES DIVISION.

**JUNE 24, 2010 4:00 PM – 8:00 PM
BIRCH BAY BIBLE COMMUNITY CHURCH
7039 JACKSON ROAD, BLAINE WA**

From 4PM – 8PM on June 24, 2010, the Whatcom County Natural Resources Division hosted a Low Impact Development (LID) design workshop to examine potential site development case studies and test ideas about habitat protection, stormwater management, and development density.

The first portion of the workshop was dedicated to providing an overview of the proposed development manual, and the Birch Bay Action Plan as a whole, as well as examples of LID practices. Next there was a design exercise, where participants designed a development project by incorporating low impact development strategies. There was a discussion on what incentives could be offered to encourage LID, and what criteria a project would need to meet in order to qualify as an LID project.

Questions and comments were taken throughout the entirety of the workshop and are bulleted below:

- A participant asked if the County standards would be consistent with the Department of Ecology LID standards that are being developed for NPDES areas. Staff replied that Birch Bay is not included as an NPDES area, but that standards developed here would qualify under Ecology standards if later required.
- A participant asked if the Birch Bay Action Plan is only to address stormwater. Staff replied that there are multiple objectives including protection of steams and wetlands, not just stormwater.
- A participant asked what incentives are being considered as part of the Action Plan. Incentives have not been decided, but staff noted they could include 9-lot short plats, a dedicated staff person to shepherd permits through the permitting process, and expedited review.
- One participant feels that off-site mitigation will not work. They stated that their property was flooded due to runoff from upland development, after off-site mitigation was approved by Whatcom County.
- One participant stated that before anything is done, there should be a complete drainage inventory, to know where the water is and where it goes. The objective should be to get the drainage to the lowlands.
- There is a need for post development monitoring and maintenance, and if need be, enforcement.
- Stormwater facilities need to be maintained, who will do that?
- A couple of participants indicated the need for a basin plan to manage stormwater, with a central lowland point to manage the runoff instead of a distributed system of stormwater water ponds and practices.
- There should be neighborhood input on development proposals.
- A participant expressed concerns regarding costs to taxpayers if in-lieu fees for mitigation aren't self sustaining and need county subsidization.
- Participants expressed the desire to have the ability to have smaller cottage style buildings rather than condos.

Staff noted that the input from this workshop will be used to help create the LID manual and that there will be a future meeting with the public in August to present a draft of the manual and continue to receive input.

Site Design Workshop Agenda



JUNE 24, 2010 4—8 PM
BIRCH BAY BIBLE COMMUNITY CHURCH
7039 JACKSON RD. AT THE INTERSECTION OF
JACKSON ROAD AND TERRELL CREEK.

BIRCH BAY WATERSHED ACTION PLAN

Background - Whatcom County received a grant from the Environmental Protection Agency in 2008 to implement watershed based land use planning. Birch Bay and Terrell Creek Watersheds were selected due to new water quality concerns, good wildlife habitat, coupled with high population growth. This effort builds on the resource inventory and analysis of the 2007 Watershed Characterization.

Agenda

- 4:00 - Introductions
- 4:15 - Overview of manual and project
- 4:30 - Examples of development practices that provide habitat protection, stormwater management, and wetlands protection
- 5:00 - Food break (we will provide lite fare and refreshments)
- 5:15 - Facilitated design exercise
- 6:15 - Project eligibility criteria
- 7:00 - Incentives discussion
- 7:30 - Next Steps
- 8:00 - Go home

Workshop Goals

- Create low impact development site design examples that can be incorporated into a forth-coming development manual
- Discussion of potential incentives for low impact development and criteria for eligible projects



Birch Bay Watershed Action Plan LID Site Design Workshops

YOU'RE INVITED!

Who: Residents and builders of the Birch Bay watershed.
Hosted by Whatcom County Staff and Consultants

What: A hands-on workshop to examine potential site development case studies and test ideas about habitat protection, stormwater management, and development density.

Where: Birch Bay Bible Church (June 24th) and County's Northwest Annex (June 30th)

When: June 24th and 30th, 2010, **4 - 8 PM**

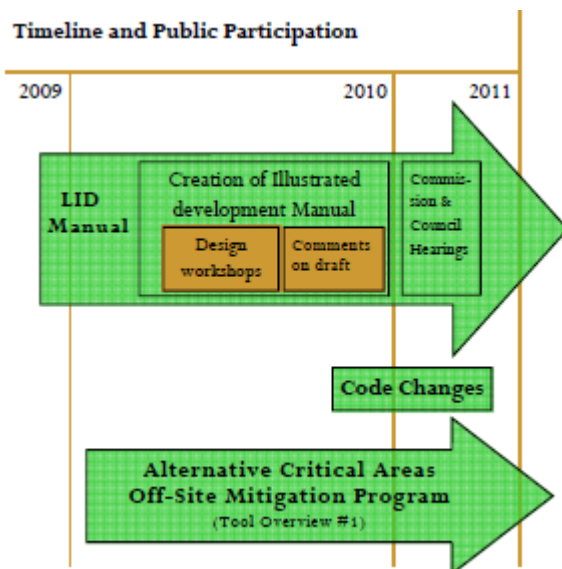
RSVP by June 11: Peter Gill (pgill@co.whatcom.wa.us) Please indicate the date you are interested in attending.

Details: We would like to keep each workshop small, 10 - 20 people. Participants will work with experts in the area of site design, landscape ecology, and stormwater management. The goal of the workshops is to get community input on the pros and cons of various development options by looking at real-world situations. Information generated at the workshops will be included in a development manual to be completed later this year. The LID development manual will consolidate regulations into one illustrated manual that focuses on conservation design and stormwater management through low impact development.



THE BIRCH BAY WATERSHED DEVELOPMENT MANUAL

Timeline and Public Participation



The LID development manual will consolidate regulations into one illustrated manual that focuses on conservation design and stormwater management through low impact development. The program is being built in cooperation with Whatcom County permit review staff to ensure smooth implementation and incentives to motivate the development community to take this optional route.

<http://www.co.whatcom.wa.us/pds/naturalresources/specialprojects/birchbaywatershed-actionplan.jsp>

Questions or comments contact Peter Gill. pgill@co.whatcom.wa.us or call 360-676-6907

Design Exercise

Site Information:

- **Size:** approximately 38 acres
- **Location & Zoning:**
 - Terrell Creek Mainstem (See Watershed Characterization Profile)
 - Outside the UGA
 - R5 zoning (no public water)
 - Outside Ag Protection Overlay
- **Gross Density:** 1 DU/5acres
- **Existing development:** a single-family rural residence with several out buildings located near the northwest corner of the parcel. Most of the parcel has been cleared (pastured).
- **Road access:** an arterial runs along the north boundary of the parcel
- **Wetlands:** a low quality, mowed wetland bisects the property runs diagonally across the site, SW to NE.
- **Streams:** a fish-bearing stream runs along the south side of the site.
- **Buffers:**
 - Wetland Buffer = 80 ft
 - Stream Buffer = 100 ft (the buffer along the north bank is located mostly within the parcel. Approximately 50% of it has been cleared).
- **Soils:** Group D (low permeability)
- **Forested cover:** ~2 acres; a small area of adjacent forest extends into the southeast corner of the parcel.
- **Topography:** The site slopes gently from north to south. The stream channel is at bottom of a ravine with a moderately steep to steep slope.
- **Existing impervious surface:** 0.6 acre

Design Exercise

Design Steps

1. Evaluate the watershed conditions that may pose challenges and/or opportunities for site development. Key questions:
 - Does the site drain to special water bodies with special water quality needs (e.g., Terrell Creek, Birch Bay)?
 - Is the site linked to a special habitat system?
 - Are there known downstream flooding problems?
 - Is additional development anticipated for the area that could lead to further restrictions (e.g., protection of downstream land and water uses) or opportunities (e.g., partnerships in multi-site water quality or quantity controls)?

2. Evaluate site-specific factors that influence stormwater management, habitat and other qualities:
 - Identify the existing soil types. Are there opportunities for infiltration?
 - Identify the major hydrologic features including swales, depressions, seeps, etc.
 - Identify forest cover and other native vegetation
 - Identify wetlands and the pathway for flows into and out of the wetland
 - Identify streams and riparian areas
 - Identify floodplains and assess floodplain vegetation
 - Assess how size and shape of the site affect stormwater management

3. Plan site development:
 - Define “conservation” areas
 - Locate potential home sites
 - Layout streets and other infrastructure
 - Draw lot boundaries
 - Which non-structural BMPs be used to manage stormwater and create/protect habitat
 - Which structural BMPs be used to manage stormwater and create/protect habitat