

Clark County

Phase 1 Municipal Stormwater Permit

*National Pollutant Discharge Elimination System & State Waste
Discharge General Permit*

2013-2018

Municipal Code and Stormwater Manual Update Project

Updated 4.3.14



*Round Lake
Photo: Gary Piazza*



Updating Our Stormwater Rules

Municipal Code & Stormwater Manual

VISION

Clark County's stormwater runoff is managed to protect the vitality of our community's waterways including our groundwater, rivers, and lakes while supporting an economically vibrant and livable community.

MISSION

To create stormwater management regulations that comply with state and federal regulations while being flexible and tailored to multiple project types, including making *Low Impact Development (LID)** the approach for stormwater management in site development.



Updating Our Stormwater Rules

GOALS

- **Adopt regulations that comply with state and federal water pollution laws** in reducing polluted storm runoff
- **Meet NPDES permit deadlines** to minimize exposure for the county to regulatory and legal challenges
- **Develop an integrated set of development codes** that protect surface and groundwater from stormwater runoff, including the broad use of techniques that utilize low impact development (LID) practices
- **Tailor LID feasibility requirements** to local conditions ensuring projects are effective and safe, as well as identifying flexible alternatives for implementation



Updating Our Stormwater Rules

GOALS - continued

- **Create a single Stormwater Manual** for development projects that require engineering , including county roads
- **Create a clear and concise 'Small Project' manual for residential building projects** using a minimal amount of text and well-designed illustrations (ON HOLD pending funding)
- **Revise application and review processes to be streamlined,** articulate, effective and supported by county staff.
- **Engage internal and external stakeholders in the update process** so that the resulting code is understandable and applicable to development projects
- **Provide sufficient training and education for staff and the public** to understand how to implement new code requirements



The update project components:

No.	Major Project Task	Status	Next
1	LID Barrier review of municipal code *	Completed work with consultant team	Coordinate with internal stakeholders on language updates
2	Municipal Code updates	Major rewrite in progress based on LID Barrier review and stakeholder discussions	Finish draft language for January review & discussion with key stakeholders
		Chapters 40.485 & 13.26A	Need to submit draft to DOE by June 2014
3	Stormwater Manual updates	Revise all chapters	In progress, working towards a March 15, 2014 deadline for a draft to review and comment prior to June 2014 submittal to DOE
		Updating standard engineering plan details and information	Moving some information to manual as design guidelines or refer to WSDOT designs
4	Public Outreach	TAC and SAC meetings ongoing	Continue key stakeholder and general public outreach tools (e.g. e-newsletters, web updates, etc.)

** Refer to LID Review handout*



LID Barrier Review of code (Title 40 and Comp Plan)

The review was divided into the following classifications to aid the review process by categorizing type of LID barrier:

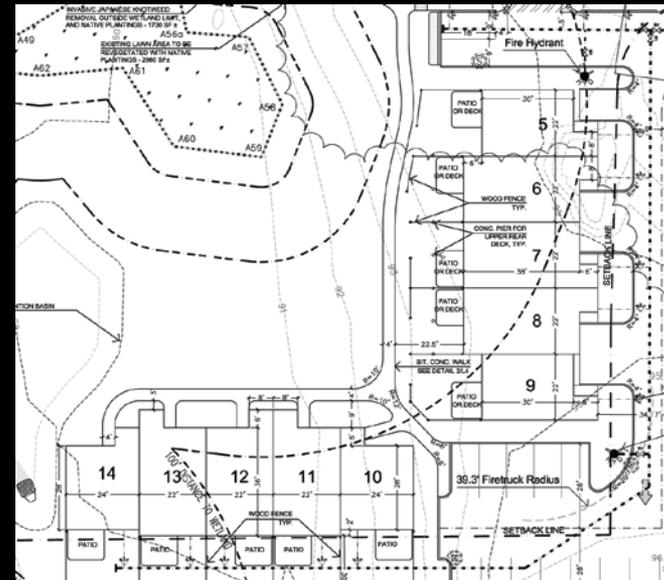
- **Imposes/Encourages Impervious Surface**: provisions that impose or encourage impervious surface area. These provisions could include parking and loading requirements, maximum floor-area-ratios (FARs) that promote horizontal development, minimum road widths, curb and gutter requirements, etc.



LID Barrier Review of code (Title 40 and Comp Plan)

The review was divided into the following classifications to aid the review process by categorizing type of LID barrier:

- **Incompatible Design Standard**: design standards that are incompatible with LID, such as prescribing landscaping materials that would preclude bioretention and/or be unsuitable adjacent to pervious pavement.



LID Barrier Review of code (Title 40 and Comp Plan)

The review was divided into the following classifications to aid the review process by categorizing type of LID barrier:

- **Procedural Obstacle**: plan submittal, review, and approval procedures that complicate or are incompatible with the approaches for designing and building LID features. These may include code provisions such as the planned unit development and variance procedures that govern how and when modifications from zoning and development standards are permitted.



Commercial Building Permit Application		 <small>Revised 09/13/2010</small>	
Permit Number: _____		<small>CLARK COUNTY WASHINGTON</small> <small>grand past. promising future</small>	
Shell: _____			
Applicant Name:	Applicant Phone:	Applicant E-Mail:	
Applicant Fax:	Applicant Address:		
Contact Person:	Contact Phone:	Contact Email:	
Contact Fax:	Contact Address:		
Owner Name:	Owner Phone:	Owner Address:	
Contractor/Builder Name:	Contractor Phone:		
Contractor License Number	Certified Erosion Control Person	Erosion Control Person Contact Phone:	
Site Plan Review/Final Site Plan Number		Project Name:	
Current Zone: _____ Use Table: _____		Project Valuation:	
Describe Proposal & Use:			
Application Type: <input type="checkbox"/> New Building <input type="checkbox"/> Shell Only <input type="checkbox"/> Tenant Improvement <input type="checkbox"/> Portable Structure <input type="checkbox"/> Addition <input type="checkbox"/> Interior Only <input type="checkbox"/> Landlord Improvement <input type="checkbox"/> Other: _____	Utilities: <input type="checkbox"/> Septic <input type="checkbox"/> Sewer (District) _____ <input type="checkbox"/> Well <input type="checkbox"/> Water District _____	Restaurant use: <input type="checkbox"/> Current Seating _____ <input type="checkbox"/> Proposed Seating _____	Existing Sq Ft: Proposed: _____ 1 st Story: _____ 2 nd Story: _____ Additional: Carport: _____ Garage: _____ Deck/Porch: _____ Is there an elevator Y/N
Do you need other permits? (Separate Application Required) <input type="checkbox"/> Mechanical, Electrical, Gas, Plumbing, Fire, etc.		Type of Heat: <input type="checkbox"/> Electric	# of Buildings: _____ # of Units: _____

LID Barrier Review of code (Title 40 and Comp Plan)

The review was divided into the following classifications to aid the review process by categorizing type of LID barrier:

- **Encourages Removal or Discourages Restoration of Native Vegetation**: provisions that limit the retention or restoration of native vegetation, such as requiring “maintained” landscaped areas.



Potential Code Updates

Code section	Code name	Areas to be considered for updates
14.06	Clark County residential code	Roof assembly materials (green roof)
40.100	Definitions	Update a series of terms for consistency with Department of Ecology terminology
40.230	Commercial, business, mixed-use & industrial	Allow the use of LID to meet landscape requirements
		Minimize conflicts between perimeter berms and LID
40.320	Landscaping and screening	Update reference cross-sections for LID usage
		Allow the use of permeable pavement in several instances
		Minimize the conflict between screen walls/fencing and LID features
		Minimize conflicts between screen plantings and LID
40.340	Parking and loading standards	Clarify use of low-growing LID vegetation in certain situations
		Clarify use of permeable surfacing for pedestrian circulation
40.385	Stormwater and Erosion Control	Rewrite to a new section 40.38X – make the code be the “what is required” and move language on “how to meet requirements” to the stormwater manual. Remove redundancies, conflicting info, etc.

A list of approximately 60 recommendations were submitted by our consultant team for review and consideration.



Future Code Updates (based on needs)

Based on coordination with internal stakeholders, there are several areas that may be considered in the future:

- **Adjusting setback requirements**: To enhance the protection of “native vegetation”
- **Commercial Districts**: Adjust widths of pavement requirements to reduce impervious surfaces
- **Landscaping requirements**: Methods for use in rights-of-way to meet LID goals
- **Parking and loading calculations**: review the maximums / minimums to reduce impervious surfacing
- **Transportation and circulation**: road standards that meet current techniques and technologies
- **Comprehensive growth management plan**: this is being updated via a separate project and will address updates through the parallel effort



Stormwater Manual update status

Book 1: A designer's manual defining thresholds and giving parameters for modeling, hydrology and design

- *This book covers the overall description of the permit requirements*
- *Complete description of all submittal requirements*
- *Describes the technical analysis required (i.e. soils, infiltration rates, etc.)*
- *Covers administration requirements*
- *Describes the resources necessary to complete an application*

Book 2: BMP Design Sheets and Standard Details

- This book is primarily for design and review engineers – technical details

Book 3: Pollution Source Control

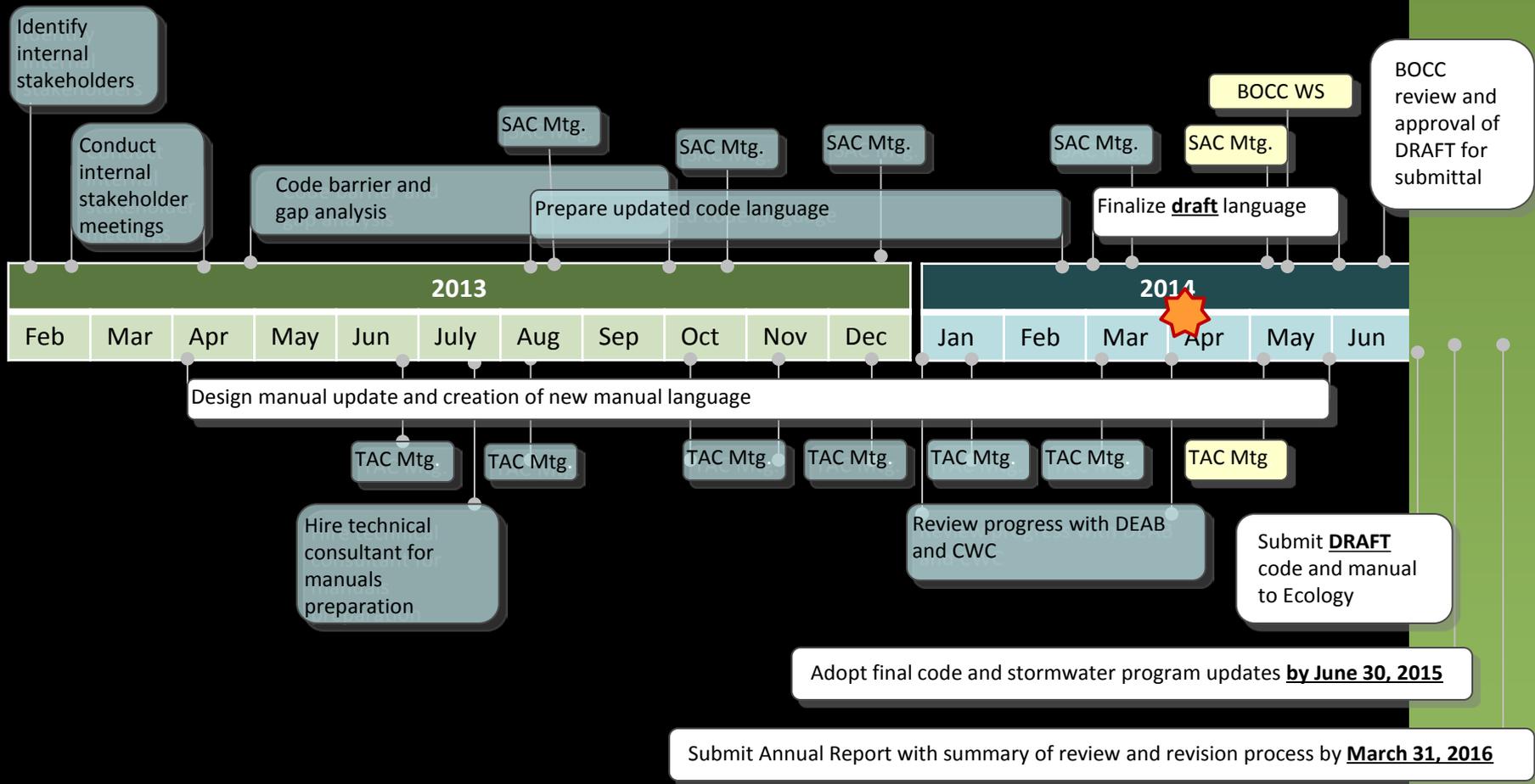
- This book is primarily for business operators – how to control water pollution at their business

Book 4: Operations and Maintenance

- This book is primarily for stormwater facility owners/operators; also for design engineers who must include an O&M for facilities with submittal; also for county inspectors
- The O&M manual will be updated with more “how to” language than it previously contained



Where we are at with the update project



This is the schedule for Clark County as a Phase 1 permittee. Other Phase II permittees (cities in Clark County) are on a different schedule (approximately 1 year behind our timeline)



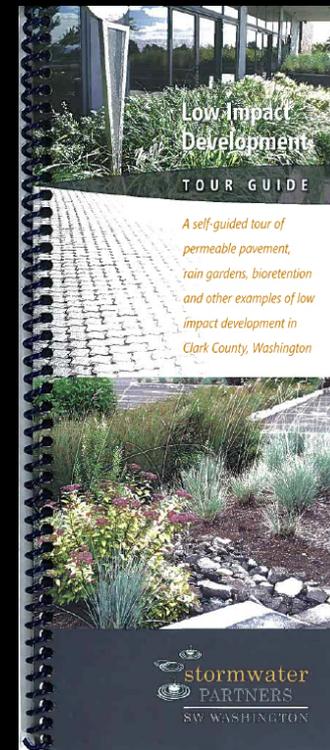
Need more information...

Department of Environmental Services

www.clark.wa.gov/stormwater

What you can do...

- Tour LID Sites in our community to learn more about what they look like and how they function....copies of the LID Tour Booklet available at PSC or visit www.stormwaterpartners.com/LID
- Participate in the process and let us know your thoughts
- Participate in our Green Neighbors and Green Business programs (lots of ideas and options) clarkgreenneighbors.org & clarkgreenbiz.com



Comments & questions?

