Regional Water Quality Control Board MS4 Permit Workshop

Prior Lawful Approval (PLA) Policy



Tuesday, April 28, 2015 200 Civic Center Drive Vista, California



1

Introductions

- The Coalition
 - San Diego Building Industry Association
 - Building Industry Association of Southern California
 - Associated General Contractors
 - Associated Builders and Contractors
 - San Diego Regional Chamber of Commerce
 - Business Leadership Alliance
 - San Diego Association of Realtors
 - San Diego Apartment Association
 - NAIOP (National Association of Industrial & Office Properties)
 - BOMA (Building Office & Management Association
 - San Diego Chapter of the American Society of Landscape Architects.

Background

- Working with Copermittees/NGOs re: meaning of permit section E.3.e.(1)(a)
 - City of San Diego, County, Chula Vista, Carlsbad, San Marcos, Escondido, El Cajon, and Santee
 - Regional Board staff
 - Coastkeeper
- General agreement: the section requires clarification. But no consensus on specific language.
- Time for the Regional Board to weigh in.

3

Current Permit Language in E.3.e.(1)(a) Applications Applications with without lawful lawful approval approval by the before the BMP Copermittee by the Design Manual is time the BMP updated... Design Manual is updated... Copermittee may Copermittee must allow previous land require and confirm development the requirements of requirements to apply. E.3 are implemented. [Emphasis added.]



Issues Requiring Clarification by the Board

- What is the purpose of Section E.3.e.(1)(a)?
- What is a "Prior Lawful Approval"?
- When may a Copermittee use its discretion to allow previous land development requirements to apply?

The Purpose of Section E.3.e.(1)(a)

- Address the disconnect between permit cycles and entitlement cycles
 - Permits are revised every 5 years.
 - Project approvals from inception to building permits are much longer (7 to 10 years)
- Provide predictability for design and financing
- Avoid takings claims against Copermittees over statutory and common-law vested rights

7

Permit Cycle Disconnect Example: Redevelopment of Brown Field Airport

- 2006: RFP by City of San Diego
- 2009: Development Department approval of site designated including WQTR in conformity with 2007 permit
- 2013: Certification of EIR and approval of Site Development Permit including WQTR
- 2014: Challenge to certified EIR
- 2016: Grading permits and commencement of construction

But, if required to comply w/ 2013 permit...

And if investors walk away, back to Square 1!

- Public is denied:
 - 6,000 new jobs, most at prevailing wage
 - A critical piece of public infrastructure
 - An economic engine in a depressed area
 - Tax revenue
 - Loss of water quality improvements for existing development on airport.

Defining a "Prior Lawful Approval"

- Currently an undefined term in the permit
 - Creates uncertainty and fear for Copermittees
 - Creates uncertainty for the development of both public and private projects whose entitlement cycles are much longer than permit cycles.
 - Creates funding uncertainties for both public and private projects.
- Other regional boards have addressed this issue.

9

Examples of PLA Policies in Other MS4 Permit Regions (see handout)

	Los Angeles County	Central Coast Region	Sacramento	Ventura County
Source	Order# R4-2012-0175	Post Construction Storm Water Management Requirements	Stormwater Quality Partnership Hydromodification Management Plan	Ventura Technical Guidance Manual
Date	November, 2012	July, 2013	February, 2013	July, 2011
Development Agreements	Silent	Silent	Silent	Exempt
Vesting Tentative Maps	Exempt	Silent	Silent	Exempt
Tentative Maps	Silent	Silent	Exempt	Exempt
Other Discretionary Permit	Exempt (1st permit)	Exempt	Exempt	Exempt
Other Ministerial Permit	Silent	Exempt	Exempt	Silent
Commencement of Work	Silent	Silent	Silent	Exempt

LO

When may a Copermittee allow previous land development requirements to apply?

- Project complies with requirements in previous permit cycle
- The project has a vested right
- Special circumstances requiring Copermittee discretion
 - Health and Safety
 - Other

11

Clarity and Consistency Benefit Everyone

- Project applicants
- Copermittees
- Regional Board
- Non-governmental organizations
- Public

Objectives of Clear PLA Language

- Provide a clear minimum standard that each Copermittee can rely on as a basis for MS4 permit compliance.
- Recognize and honor vested rights in order to protect Copermittees from takings claims and to avoid budgetary crisis for CIP, FPPF and assessment district financing.
- Protect Copermittee land use authority by allowing them to impose higher standards required to protect health and safety or to prevent a nuisance.
- Reflect statewide trends in addressing the meaning and implementation of Prior Lawful Approval provisions, which are not unique to this permit.

13

Proposed Permit Language (Replaces Section E.3.e.(1)(a); does not alter (b) through (d))

(a) Each Copermittee must require and confirm that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by the time the BMP Design Manual is implemented pursuant to Provision E.3.d, the requirements of Provision E.3 are implemented. For project applications that have received prior lawful approval before the BMP Design Manual is implemented pursuant to Provision E.3.d, the Copermittee may allow previous land development requirements to apply.

- i. For private development projects, "Prior Lawful Approval" means projects that have entered into a development agreement as defined by the California Government Code or have received a first discretionary approval or ministerial permit prior to the time the BMP Design Manual is implemented. A Prior Lawful Approval shall include any subsequent discretionary or ministerial entitlement necessary to implement the initial Prior Lawful Approval.
- ii. For public projects, the Copermittee shall develop and adopt an equivalent approach to that for private projects.
- iii. For project applications that have obtained a Prior Lawful Approval before the BMP Design Manual is implemented pursuant to Provision E.3.d, the Copermittee may use its discretion to allow previous land development requirements to apply.
- iv. Projects with Prior Lawful Approvals as defined above that predate Order No.R9-2007-0001 for San Diego County Copermittees, Oder No. R9-2009-0002 for Orange County Copermittees, and Order No. R9-2010-0016 for Riverside County, Copermittees shall be required to incorporate Treatment Control BMPs necessary to achieve the water quality standards set forth in the applicable Orders identified above to the Maximum Extent Practicable, as determined by the Copermittee on a case by case basis.

The Coalition's Request

 Direct staff to incorporate the Coalition's proposed language for E.3.e.(1)(a) into Tentative Order No. R9-2015-0001 for review and comment by all stakeholders prior to consideration for adoption by the Regional Board.

15

Questions

?

Proposed Prior Lawful Approval Language

e. Priority Development Project BMP Implementation and Oversight

Each Copermittee must implement a program that requires and confirms structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in stormwater to the MEP.

(1) Structural BMP Approval and Verification Process

- (a) Each Copermittee must require and confirm that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by the effective date of the BMP Design Manual pursuant to Provision E.3.d, the requirements of Provision E.3 must be implemented. For project applications that have received prior lawful approval before the effective date of the BMP Design Manual pursuant to Provision E.3.d, the Copermittee may allow previous land development requirements to apply.
- (b) For private development projects, prior lawful approval under this Order is any development approval or construction permit that either:
 - 1) complies with the Priority Development Project requirements of the immediately prior MS4 permits and includes the design of the storm water drainage system for the project in its entirety as accepted by the Copermittee, or
 - 2) in the case of a development agreement, vesting tentative map or common law mechanism established by the State allowing for the vesting of rights, the rights vested shall be deemed to include the right to proceed under the Priority Development Project requirements of the immediately prior MS4 permits.

For public projects, approval means that the design of the storm water drainage system for the project in its entirety complies with the Priority Development Project requirements of the immediately prior MS4 permits and has been stamped by the City or County Engineer or engineer of record for the project. For public projects completed on a design build or similar basis where project design is completed after construction contract award, the project may be designed in conformance with the Priority Development Project requirements of the immediately prior MS4 permits if the contract is awarded before the effective date of the BMP Design Manual.

For any applicable portion(s) of a public or private project, approvals may be extended to any subsequent discretionary or ministerial approvals necessary to implement the initial project approval with the following conditions:

- (i) All grading permits and other discretionary approvals, or equivalent discretionary approvals for public projects, must be issued within 5 years of the effective date of the BMP Design Manual pursuant to Provision E.3.d. Subsequent permits may be issued beyond 5 years after the effective date of the BMP Design Manual, provided that the backbone storm water drainage system that services or connects to the project, which is the subject of any subsequent permits, has already been constructed and any remaining Structural BMP's have been installed in substantial conformity with the initial approval; and
- (ii) BMP installation under subsequent approvals must remain in substantial conformity with the design of the storm water drainage system included in the initial approval.

Proposed Prior Lawful Approval Language for

e. Priority Development Project BMP Implementation and Oversight

Each Copermittee must implement a program that requires and confirms structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in stormwater to the MS4-PermitMEP.

- (1) Structural BMP Approval and Verification Process
 - (a) Each Copermittee must require and confirm that for all Priority Development Project applications that have not received Prior Lawful Approval prior lawful approval by the Copermittee by the time-effective date of the BMP Design Manual is implemented pursuant to Provision E.3.d, the requirements of Provision E.3 are implemented must be implemented. For project applications that have received prior lawful approval before the effective date of the BMP Design Manual pursuant to Provision E.3.d, the Copermittee may allow previous land development requirements to apply.
 - (b) For private development projects, "Prior Lawful Approval" means projects prior lawful approval under this Order is any development approval or construction permit that have entered into either:
 - 1) complies with the Priority Development Project requirements of the immediately prior MS4 permits and includes the design of the storm water drainage system for the project in its entirety as accepted by the Copermittee, or
 - 2) in the case of a development agreement—as defined by the California Government Code or have received a first discretionary approval or ministerial permit prior to the time, vesting tentative map or common law mechanism established by the State allowing for the vesting of rights, the rights vested shall be deemed to include the right to proceed under the Priority Development Project requirements of the immediately prior MS4 permits.

For public projects, approval means that the design of the storm water drainage system for the project in its entirety complies with the Priority Development Project requirements of the immediately prior MS4 permits and has been stamped by the City or County Engineer or engineer of record for the project. For public projects completed on a design build or similar basis where project design is completed after construction contract award, the project may be designed in conformance with the Priority Development Project requirements of the

<u>immediately prior MS4 permits if the contract is awarded before the effective date of the BMP Design Manual is implemented.</u> A Prior Lawful Approval shall include.

- For any applicable portion(s) of a public or private project, approvals may be extended to any subsequent discretionary or ministerial entitlementapprovals necessary to implement the initial Prior Lawful Approval. project approval with the following conditions:
 - ii. For public projects, the Copermittee shall develop All grading permits and adopt another discretionary approvals, or equivalent approach to that discretionary approvals for private projects.
 - before public projects, must be issued within 5 years of the effective date
 of the BMP Design Manual is implemented pursuant to Provision E.3.d_{7.}
 Subsequent permits may be issued beyond 5 years after the Copermittee may use its discretion to allow previous land development requirements to apply.
 - (i) Projects with Prior Lawful Approvals as defined above that predate Order No.R9-2007-0001 for San Diego County Copermittees, Oder No.R9-2009-0002 for Orange County Copermittees, and Order No.R9-2010-0016 for Riverside County Copermittees shall be required to incorporate Treatment Control BMPs necessary to achieve effective date of the BMP Design Manual, provided that the backbone storm water quality standards set forth in the applicable Orders to drainage system that services or connects to the Maximum Extent Practicable, as determined by project, which is the Copermittee on a case by case basis subject of any subsequent permits, has already been constructed and any remaining Structural BMP's have been installed in substantial conformity with the initial approval; and
 - (ii) BMP installation under subsequent approvals must remain in substantial conformity with the design of the storm water drainage system included in the initial approval.

Comparison of RWQCB and Building Industry Coalition Proposals: April 27, 2015

BILLE WAYNE BUSINESS	RWQCB	Building Industry Coalition			
1. "Grandfathering"					
Trigger	Effective date of the BMP Design Manual (Dec. 24, 2015)				
Illigger	 Before Effective Date: Fourth Term (or "immediately prior") MS4 permit" 				
1	o Before Effective Date: Fourth Term (or "immediately prior") MS4 perm o After Effective Date: 2013 Permit standards				
	o Alter Effective Date: 2013 i	crime standards			
2. Limitations on	2007 Permit floor except private	2007 Permit floor in all instances.			
Coverage	development projects where the PLA	2007 Ferritic floor in air miscances.			
	includes a development approval or				
1	construction permit that confers a vested				
i	right to proceed under prior storm water				
	requirements.				
3. Private Development	Any development approval or construction pe	rmit that either 1) complies with the PDP			
Projects	requirements of the Fourth Term [or immediately prior] MS4 permits and includes the				
	design of the storm water drainage system for the project in its entirety as accepted by the				
1	Copermittee, OR				
	2) confers a vested right to proceed under	2) in the case of a development agreement,			
	prior storm water requirements.	vesting tentative map or common law			
		mechanism established by the State			
		allowing for the vesting of rights, the rights			
		vested shall be deemed to include the right			
		to proceed under the PDP requirements of			
		the immediately prior MS4 permits			
4. Public Projects	The design of the storm water drainage	The design of the storm water drainage			
1	system for the project in its entirety has	system for the project in its entirety			
	been stamped by the City or County	complies with the PDP requirements of the			
1	Engineer.	immediately prior MS4 permits and has			
		been stamped by the City or County			
		Engineer or engineer of record for the			
		project. For public projects completed on a			
l		design build or similar basis where project design is completed after construction			
l		contract award, the project may be			
		designed in conformance with the Priority			
		Development Project requirements of the			
		immediately prior MS4 permits if the			
		contract is awarded before the effective			
		date of the BMP Design Manual.			
5. PLA Extensions	For any applicable portion(s) of a public or priv				
	any subsequent discretionary or ministerial ap				
	project approval with the following conditions				
	(i) All subsequent permits must be issued	(i) All grading permits and other			
	within 5 years of the effective date of the	discretionary approvals, or equivalent			
	BMP Design Manual pursuant to Provision	discretionary approvals for public projects,			
	E.3.d, AND	must be issued within 5 years of the			
		effective date of the BMP Design Manual			
		pursuant to Provision E.3.d., AND			
		Subsequent permits may be issued beyond			
		5 years after the effective date of the BMP			
		Design Manual, provided that the backbone			
		storm water drainage system that services			
		or connects to the project, which is the			
		subject of any subsequent permits, has			
	(ii) BMP installation under subsequent approva	already been constructed; AND			
	with the design of the storm water drainage sy				
Land to the second seco	with the design of the storm water drainage sy	stem included in the initial approval.			

Document	Ventura County	LA County	Sacramento	Central Coast Region	SD Region Proposal
Source	Ventura Technical Guidance Manual	Order # R4-2012- 0175	Stormwater Quality Partnership Hydromodification Management Plan	Post Construction Storm Water Management Requirements	Copermittees and Private Parties
Date	July, 2011	November, 2012	February, 2013	July, 2013	August, 2014
Development Agreements	Exempt	Silent	Silent	Silent	Exempt
Vesting Tentative Maps	Exempt	Exempt	Silent	Silent	Silent
Tentative Maps	Exempt	Silent	Exempt	Silent	Silent
Other Discretionary Permit	Exempt	Exempt (1 st permit)	Exempt	Exempt	Exempt
Other Ministerial Permit	Silent	Silent	Exempt	Exempt	Exempt
Commencement of Work	Exempt	Silent	Silent	Silent	Silent

Resolution No. R3-2013-0032

Example - Central Coast Region
"excerpts of Applicability
ATTACHMENT 1 of New
Requirements"

POST-CONSTRUCTION STORMWATER MANAGEMENT REQUIREMENTS FOR DEVELOPMENT PROJECTS IN THE CENTRAL COAST REGION

July 12, 2013

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone • (805) 549-3147
http://www.waterboards.ca.gov/centralcoast/

To request copies of this report please contact Dominic Roques at (805) 542-4780, or by email at: droques@waterboards.ca.gov

Documents also are available at: http://www.waterboards.ca.gov/centralcoast/water issues/programs/stormwater/docs/lid/lid hydromod charette index.shtml

projects with completed project applications dated prior to September 6, 2012. The Permittee must demonstrate that the application of the Post-Construction Requirements would pose financial infeasibility for the project. The Permittee shall not grant any exemptions without prior approval from the Central Coast Water Board Executive Officer.

2) Performance Requirement No. 1: Site Design and Runoff Reduction

- a) The Permittee shall require all Regulated Projects that create and/or replace ≥ 2,500 square feet of impervious surface (collectively over the entire project site), including detached single-family home projects, to implement at least the following design strategies throughout the Regulated Project site:
 - Limit disturbance of creeks and natural drainage features

ii) Minimize compaction of highly permeable soils

- iii) Limit clearing and grading of native vegetation at the site to the minimum area needed to build the project, allow access, and provide fire protection
- iv) Minimize impervious surfaces by concentrating improvements on the least-sensitive portions of the site, while leaving the remaining land in a natural undisturbed state
- Minimize stormwater runoff by implementing one or more of the following site design measures:

(1) Direct roof runoff into cisterns or rain barrels for reuse

- (2) Direct roof runoff onto vegetated areas safely away from building foundations and footings, consistent with California building code
- (3) Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas safely away from building foundations and footings, consistent with California building code
- (4) Direct runoff from driveways and/or uncovered parking lots onto vegetated areas safely away from building foundations and footings, consistent with California building code
- (5) Construct bike lanes, driveways, uncovered parking lots, sidewalks, walkways, and patios with permeable surfaces
- b) The Permittee shall confirm that projects comply with Site Design and Runoff Reduction Performance Requirements by means of appropriate documentation (e.g., check lists) accompanying applications for project approval.

3) Performance Requirement No. 2: Water Quality Treatment

- a) The Permittee shall require Regulated Projects, except detached single-family homes, ≥ 5,000 square feet of Net Impervious Area, and detached single-family homes ≥ 15,000 square feet of Net Impervious Area, to treat stormwater runoff as required in the Water Quality Treatment Performance Requirements in Section B.3.b. to reduce pollutant loads and concentrations using physical, biological, and chemical removal.
 - i) Net Impervious Area is the total (including new and replaced) post-project impervious areas, minus any reduction in total imperviousness from the pre-project to post-project condition: Net Impervious Area = (New and Replaced Impervious Area) (Reduced Impervious Area Credit), where Reduced Impervious Area Credit is the total pre-project to post-project reduction in impervious area, if any.
- b) The Permittee shall require each Regulated Project subject to Water Quality Treatment Performance Requirements to treat runoff generated by the Regulated Project site using the onsite measures below, listed in the order of preference (highest to lowest). Water Quality Treatment Performance Requirements shall apply to the runoff from existing, new, and replaced impervious surfaces on sites where runoff from existing impervious surfaces cannot be separated from runoff from new and replaced impervious surfaces.

Supposed to the state of the st

(5) Crack sealing

(6) Resurfacing with in-kind material without expanding the road or parking lot

(7) Practices to maintain original line and grade, hydraulic capacity, and overall footprint of the road or parking lot

(8) Repair or reconstruction of the road because of slope failures, natural disasters, acts of God or other man-made disaster

- ii) Sidewalk and bicycle path or lane projects, where no other impervious surfaces are created or replaced, built to direct stormwater runoff to adjacent vegetated areas
- iii) Trails and pathways, where no other impervious surfaces are replaced or created, and built to direct stormwater runoff to adjacent vegetated areas
- iv) Underground utility projects that replace the ground surface with in-kind material or materials with similar runoff characteristics
- Curb and gutter improvement or replacement projects that are not part of any additional creation or replacement of impervious surface area (e.g., sidewalks, roadway)
- vi) Second-story additions that do not increase the building footprint

vii) Raised (not built directly on the ground) decks, stairs, or walkways designed with spaces to allow for water drainage

viii) Photovoltaic systems installed on/over existing roof or other impervious surfaces, and panels located over pervious surfaces with well-maintained grass or vegetated groundcover, or panel arrays with a buffer strip at the most down gradient row of panels

ix) Temporary structures (in place for less than six months)

- x) Electrical and utility vaults, sewer and water lift stations, backflows and other utility devices
- xi) Above-ground fuel storage tanks and fuel farms with spill containment system
- c) The Permittee shall apply the Post-Construction Requirements by March 6, 2014¹, to all applicable Regulated Projects that require approvals and/or permits issued under the Permittee's planning, building, or other comparable authority. Applicable Regulated Projects include both private development requiring permits, and public projects:
 - i) Private Development Projects

(1) Discretionary Projects – The Permittee shall apply the Post-Construction Requirements to those projects that have not received the first discretionary approval of project design.

(2) Ministerial Projects – If the project is only subject to ministerial approval, the Permittee shall apply the Post-Construction Requirements to those projects that have not received any ministerial approvals. If the ministerial project receives multiple ministerial approvals, the Permittee shall apply the Post-Construction Requirements to the first ministerial approval. Ministerial approvals include, but are not limited to, building permits, site engineering improvements, and grading permits.

ii) Public Development Projects

- (1) The Permittee shall develop and implement an equivalent approach, to the above approach used for private development projects, to apply the Post-Construction Requirements to applicable public development projects, including applicable university development projects
- iii) Exemptions The Permittee may propose, to the Central Coast Water Board Executive Officer, a lesser application of the Post-Construction Requirements for

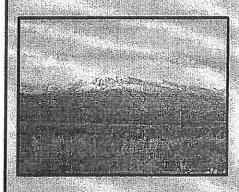
Gard Fallery per 1st Discoloning Monsal

¹ Newly enrolled Permittees Gonzales, Greenfield, and Guadalupe shall apply the Post-Construction Requirements by July 1, 2014.

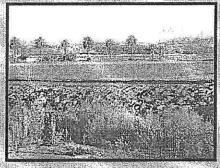
Example - Ventura Region

"example of Applicability an Revised Regimenent" Ventura County Technical Guidance Manual for Stormwater Quality Control Measures

Manual Update 2011

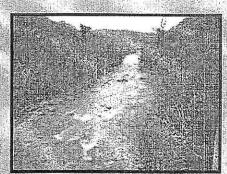














entura Countywide Stormwater Quality Management Program

Geosyntec

Larry Walker Associates 707 Fourth Street, Suite 200 Davis, CA 95616

Prepared by

Geosyntee Consultants 1111 Broadway, 6th Floor Oaldand, CA 94607

July 13, 2011

Existing single-family dwelling and accessory structure projects are exempt from the redevelopment requirements unless the project creates, adds, or replaces 10,000 square feet of impervious surface area.

Effective Date

The new development and redevelopment requirements contained in Part 4, Section E of Board Order R4-2010-0108 (the "Order") shall become effective 90 calendar days after the Regional Water Quality Control Board Executive Officer approves the 2011 TGM (the "Effective Date"). After the Effective Date, all applicable projects, except those identified below, must comply with the new development and redevelopment requirements contained in Part 4, Section E of the Order.

The new development and redevelopment requirements contained in Part 4, Section E of the Order shall not apply to the projects described in paragraphs 1 through 5 below. Projects meeting the criteria listed in paragraphs 1 through 5 below shall instead continue to comply with the performance criteria set forth in the 2002 Technical Guidance Manual for Stormwater Quality Control Measures under Board Order 00-108:

- 1) Projects or phases of projects where the project's applications have been "deemed complete for processing" (or words of equivalent meaning), including projects with ministerial approval, by the applicable local permitting agency in accordance with the local permitting agency's applicable rules prior to the Effective Date; or
- 2) Projects that are the subject of an approved Development Agreement and/or an adopted Specific Plan; or an application for a Development Agreement and/or Specific Plan where the application for the Development Agreement and/or Specific Plan has been "deemed complete for processing" (or words of equivalent meaning), by the applicable local permitting agency in accordance with the local permitting agency's applicable rules, and thereafter during the term of such Development Agreement and/or Specific Plan unless earlier cancelled or terminated; or
- 3) All private projects in which, prior to the Effective Date, the private party has completed public improvements; commenced design, obtained financing, and/or participated in the financing of the public improvements; or which requires the private party to reimburse the local agency for public improvements upon the development of such private project; or
- Local agency projects for which the governing body or their designee has approved initiation of the project design prior to the Effective Date; or
- 5) A Tentative Map or Vesting Tentative Map deemed complete or approved by the local permitting agency prior to the Effective Date, and subsequently a Revised Map is submitted, the project would be exempt from the 2011 TGM provisions if the revisions substantially conform to original map design, consistent with

Subdivision Map Act requirements. Changes must also comply with local and state law.

The intent of these guidelines is to ensure that projects for which the applications have been deemed "complete" or the applicants have worked with local permitting agency staff to develop a final, or substantially final, drainage concept and site layout that includes water quality treatment based upon the performance criteria set forth in the 2002 Technical Guidance Manual for Stormwater Quality Control Measures prior to the Effective Date, are not required to redesign their proposed projects for purposes of complying with the new development and redevelopment requirements contained in Part 4, Section E of Board Order R4-2010-0108.

INTENT OF GLANDFATH GLANDFATH

In addition, any project, phase of a project, or individual lot within a larger previously-approved project, where the application for such project has been "deemed complete for processing" (or words of equivalent meaning) that does not have a final or substantially final drainage concept as determined by the local permitting agency or a site layout that includes water quality treatment must comply with the performance standards set forth in the 2011 TGM.

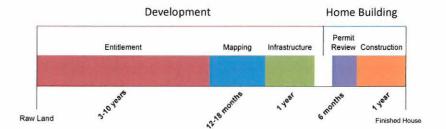
1.6 Organization of the 2011 TGM

The 2011 TGM is divided into seven sections and nine appendices:

Section 1	Introduction
Section 2	Stormwater Management Standards
Section 3	Site Assessment and BMP Selection
Section 4	Site Design Principles & Techniques
Section 5	Source Control Measures
Section 6	Retention BMPs, Biofiltration BMPs, and Treatment Control Measure Design
Section 7	Operation and Maintenance Planning
Appendix A	Glossary of Terms
Appendix B	Maps: Watersheds Delineation, Existing Urban Areas, Environmentally Sensitive Areas, and 85 th Percentile Rainfall Depth
Appendix C	Site Soil Type and Infiltration Testing



Phases of Home Building*



*Phases frequently overlap

The Fermanian Business & Economic Institute - business & economics in action

ØFREI PINII 2015

- Entitlement Phase
 - ~ Project pre-planning
 - ~ Project Submittal and review by jurisdiction
 - ~ CEQA Process
 - ~ Design and conformance with all regulatory structures, local, state and federal**
 - ~ Cost of capital associated with this process is in excess of 20% IRR or annualized return.
- Mapping Phase
 - ~ Represents the design phase of the approved project
 - \sim Potentially includes discretionary approvals from additional agencies, environmental permits, and 401 certification.
 - \sim Cost of Capital associated with this process is 15-18% IRR or annualized return.
- Infrastructure Phase
 - ~ Physically builds land development improvements
 - ~ Process is largely subject to ministerial oversight
 - ~ Cost of capital is approximately 10%
- Construction/Home Building
 - ~ Comes at the end of long process
 - ~ Extremely difficult to facilitate changes at this stage of development
 - ~ Extremely expensive to facilitate changes at this stage of development
 - ~ cost of capital is traditional bank financing at market rates

^{**}Culminates in a discretionary action by jurisdiction