



**COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT AGENCY
DEVELOPMENT SERVICES DIVISION**

2850 Fairlane Ct
Placerville, CA
530-621-5315

October 15, 2014 AGENDA

Building Industry Advisory Committee

Jeff Haberman, Chairman, Member at Large (*Colleen Malone, Alt*)
Jerry Homme, EDC Builders Exchange (*Denny Kennedy, Alt*)
Bill Carey, Member at Large (*Virgil Toothaker, Alt*)
Earl McGuire, SAGE (*Charles Truax, Alt*)
Scott Whyte, North State BIA (*William Fisher, Alt*)
Tom Burnette, Building Official (Technical Advisor)
Michael Lilienthal, Division Chief/Fire Marshal (Technical Advisor)

Wednesday, October 15, 2014

1:30 PM

TAC ROOM

The BIAC makes recommendations to the Board of Supervisors and Development Services Division regarding code interpretations, inspections, procedures, new construction techniques, product review, new codes, revised fees, and other items of industry concern (Resolution 164-2010)

1. **CALL TO ORDER**
2. **ADOPTION OF AGENDA**
3. **ADOPTION OF MINUTES JULY 16, 2014 (ATTACHMENT A)**
4. **EL DORADO COUNTY MS4 REQUIREMENTS FOR CONSTRUCTION MANAGEMENT (ATTACHMENT B)
PRESENTATION BY BRENDAN FERRY and AMY PHILLIPS**
5. **ELECTRONIC DOCUMENT REVIEW SOFTWARE
PRESENTATION BY TOM BURNETTE**
6. **OPEN/PUBLIC FORUM**
7. **NEXT MEETING**
8. **ADJOURNMENT**



**COUNTY OF EL DORADO
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DEVELOPMENT SERVICES DIVISION**

2850 Fairlane Ct
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July 16, 2014 MINUTES

Building Industry Advisory Committee

Jeff Haberman, Chairman, Member at Large (*Colleen Malone, Alt*)
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TAC ROOM

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Members Present: Jeff Haberman, Colleen Malone, Scott Whyte, Bill Carey

Members Absent: Jerry Homme, Denny Kennedy, Virgil Toothaker, Earl McGuire, Charles Truax, William Fisher, Tom Burnette, Michael Lilienthal

Staff Present: Don Knight, Roger Trout, Steve Pedretti, Julie Saylor

1. CALL TO ORDER

The meeting was called to order by Committee Chair Jeff Haberman at 1:37 pm

2. ADOPTION OF MINUTES APRIL 16, 2014 (ATTACHMENT A)

Bill Carey moved to adopt minutes. Scott Whyte seconded.

Ayes: All

Noes:

Abstain:

Absent:

3. ADOPTION OF AGENDA

Bill Carey moved to adopt agenda. Scott Whyte seconded.

Ayes: All

Noes:

Abstain:

Absent:

4. NEW REQUIREMENTS OF NOT BEING ABLE TO HAVE A SHOP BUILT OFF OF A HOME IN A GRANNY FLAT?

Don Knight questioned the agenda item as being site specific. Jeff Haberman expressed his concerns for the agenda item to be: defining terms and specifics for an attached garage versus detached garage and the breakdown of square footage for both.

Discussion: Don Knight noted the square footage requirements for second dwellings is set forth from Planning Services and would be better addressed with a staff member from Planning. Jeff Haberman agreed to postpone the idea.

Roger Trout arrived at 1:43 pm

Steve Pedretti introduced himself to the Building Industry Advisory Committee members. Steve Pedretti noted that he is currently working on the creation of improved permit center processes and was attending today to make his introductions. Steve Pedretti advised the committee that he would be providing them with the improved permit center processes for their review. Jeff Haberman was in agreement. Bill Carey offered Steve Pedretti a brief historical overview of what the Building Industry Advisory Committee is and has done.

Steve Pedretti exited at 1:45 pm

Item 4 CONTINUED Discussions: Roger Trout explained the Second Residential Unit Ordinance as part of the Zoning Ordinance limits the structure to 1,200 square feet. The only exception to the 1,200 square feet limitation is a garage. Bill Carey noted that the wording “shop” and “garage” are the issue. Bill Carey continued to note that instead of phrasing the space as a shop, to phrase it as a garage. Roger Trout explained the Ordinance is something that is approved through the Board of Supervisors and also made note of Long Range Planning’s current movement to have the Zoning Ordinance in its entirety reviewed by the Planning Commission starting in August over the course of several meetings. Roger Trout also made recommendation to the committee to go online to input their comments for review.

5. DISCUSSION OF NEW REQUIREMENTS FOR ENERGY AND GREEN CODES. (ATTACHMENT B)

Don Knight started the conversation with noting the new Green Codes are creating more stringent requirements for re-roofing, lighting, whole house fan, ventilation, insulation/walls, cool roofs, high grade windows required, new residential and a foreseen ten percent increase in overall costs. Don Knight noted that the new codes are calling for a net-zero by 2020. Scott Whyte stated the CBIA (California Building Industry Association) is constantly fighting for lowered costs and will provide the Building Industry Advisory Committee with a summary of the cost breakdowns based on the new codes. Scott Whyte mentioned the Energy Commission is discussing new requirements of EV Readiness for new residential. Jeff Haberman questioned if there has been a back off on remodels and/or additions in that the additions would fall under new building codes such as fire sprinklers? Don Knight stated no and continued discussions of green code checklists for do-it-yourself Energy Reports. Don Knight continued to state the checklist at one point was one page and now, to include all the new laws/regulations, is multiple pages.

6. EMERGENCY MEASURE FOR STAFFING PROPOSAL - CONTINUED DISCUSSIONS FROM APRIL 16, 2014 (ATTACHMENT C)

Don Knight started discussions of the Emergency Measure for Staffing Proposal. Don Knight discussed Development Services workload growth and staffing shortage. Don Knight expressed how Development Services is “the face of the county” and requested the Building Industry Advisory Committees support for additional staffing to ensure the quality of work from Development Services. Jeff Haberman noted this item was discussed and recommended for support during the Building Industry Advisory Committee

meeting of April 16, 2014. Don Knight agreed that the Building Industry Advisory Committee did make a motion of support in April but requested a written letter of support from the Building Industry Advisory Committee. Bill Carey confirmed, via Roger Trout, the additional positions being requested would be an offset of the increased revenue that Development Services has received. Jeff Haberman agreed to write a letter on behalf of the Building Industry Advisory Committee in support of the Emergency Measure for Staffing.

7. OPEN/PUBLIC FORUM

Handout: Federal, State and Local Regulations Hindering Recovery of the Building Industry and Suggestions for Code Revisions to Encourage Development

Discussion: Don Knight advised the committee the handout was an item requested for distribution from Tom Burnette. Jeff Haberman noted that the committee has already spoken on items on the list but requested the committee members to review the list to find items that need to be re-addressed.

Roger Trout exited at 2:31 pm

8. NEXT MEETING

October 15, 2014

9. ADJOURNMENT

Meeting adjourned at 2:33 pm by executive order.

EL DORADO COUNTY MS4 STORM WATER PROGRAM – CONSTRUCTION & POST CONSTRUCTION



B.I.A.C. Presentation

October 15, 2014

ATTACHMENT B

DRIVING FORCES FOR WATERSHED MANAGEMENT & STORM WATER CONTROL

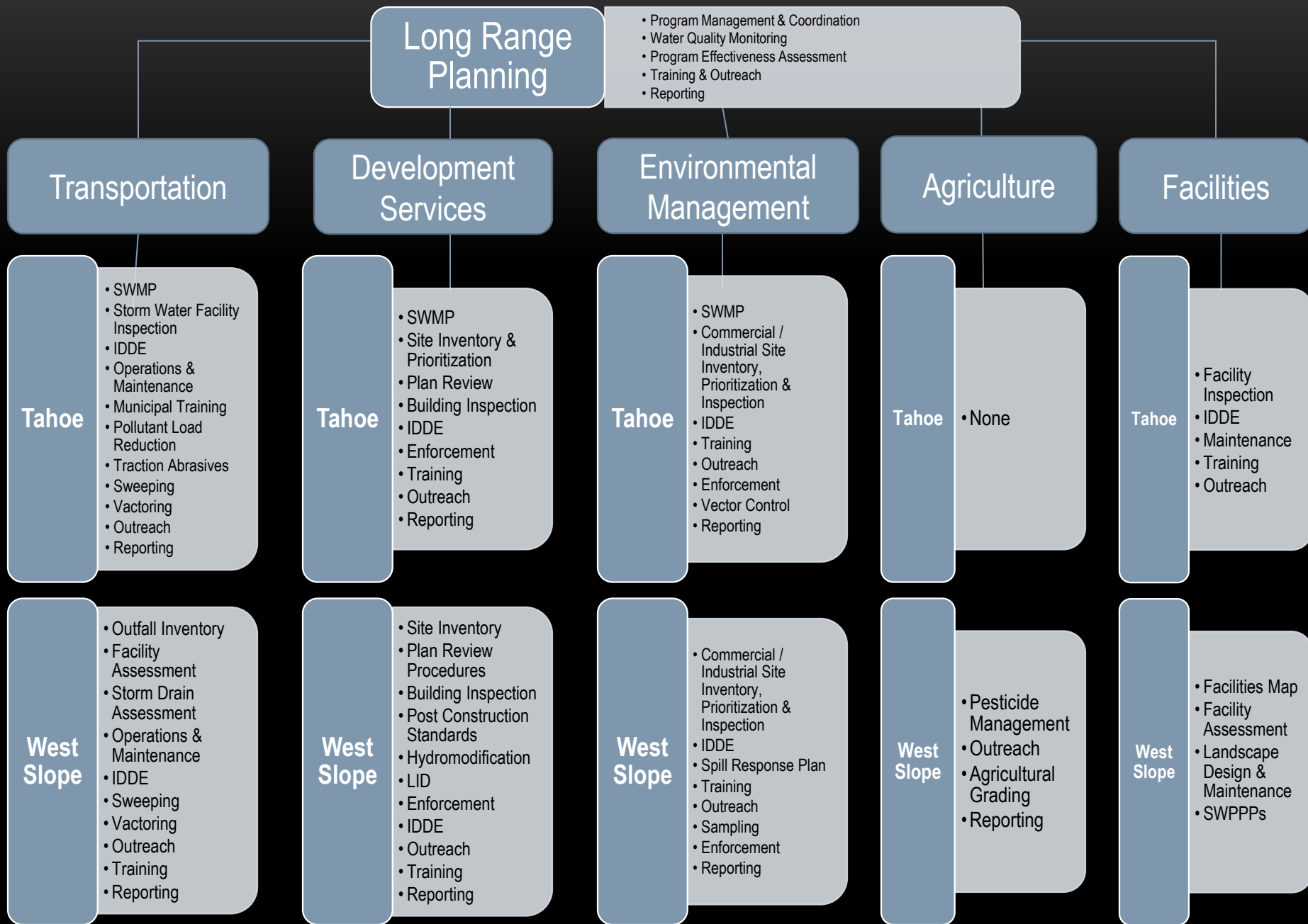
- Clean Water Act - 1972
- State & Federal Water Laws - NPDES
- Environmental Protection Agency
- Lahontan Regional Water Quality Control Board
- Central Valley Regional Water Quality Control Board
- TRPA - 208 Water Quality Management Plan



EL DORADO COUNTY'S STORM WATER PROGRAM

- National Pollutant Discharge Elimination System (NPDES)
 - El Dorado County is divided into two parts:
 - West Slope – 2010 Census Boundary (Does not include City of Placerville or Caltrans jurisdictions)
 - Region 5, Central Valley Regional Water Quality Control Board
 - Phase II CA Statewide MS4 NPDES Permit (Order #2013-0001-DWQ) – Renewal Traditional Permittee
 - Lake Tahoe Basin
 - Region 6, Lahontan Regional Water Quality Control Board
 - Phase I Municipal NPDES Permit
 - Lake Tahoe Total Maximum Daily Load (TMDL) – Fine Sediment
 - Could become more comprehensive – hydrologic cycle
-

NPDES Storm Water Management Program – Responsibilities Diagram



NPDES PROGRAM ELEMENTS

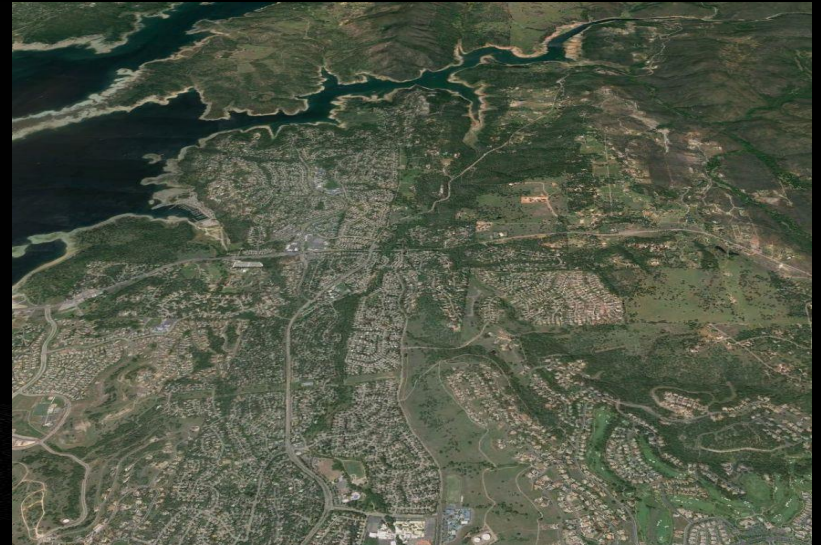
- Legal Authority
- Public Outreach / Involvement
- Illicit Discharge Detection & Elimination
- Construction Site Management
- Pollution Prevention / Good Housekeeping
- Post Construction BMPs
- Planning & Land Development
- Hydro-Modification / LID
- Water Quality Monitoring
- Fiscal Analysis



MS4 PERMIT GOALS

- Scheduling/Planning
 - Low Impact Development Techniques
- Public Education / Community Engagement
- Source (Erosion) Control
 - Preventing sediment from mobilizing
- Sediment Control
 - Recovering sediment after the particle has already detached
- Treatment
 - Infiltration
 - Filtration
 - Particle capture
- Prioritization & Connectivity
- Maintenance





USGS
CONSERVATION
BIOLOGY

LAND USE CHANGES

LARGE STORM

Greater Runoff Volume
Higher Peak Discharge

Pre-Development

Post-Development

SMALL STORM

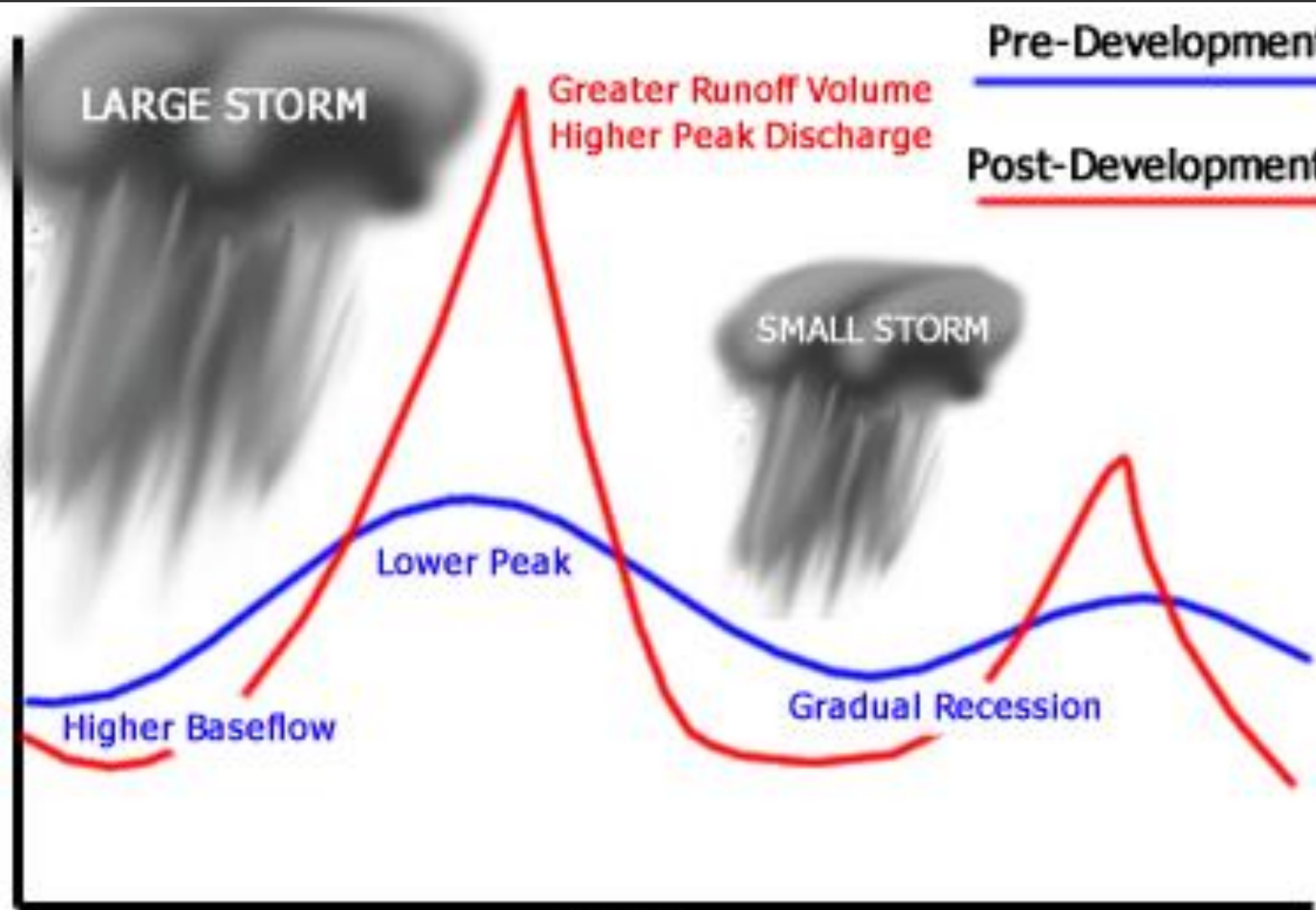
Lower Peak

Higher Baseflow

Gradual Recession

STREAMFLOW RATE

TIME



WEST SLOPE POST CONSTRUCTION REQUIREMENTS (PERMIT SECTIONS E.7.B.2, E.10 & E.12)



SECTION E.7.B.2. – CONSTRUCTION OUTREACH AND EDUCATION

“The Permittee shall ensure that all staff implementing the construction site storm water runoff control program are adequately trained. Training shall be provided to the following staff positions of the MS4”:

- Plan Reviewers and Permitting Staff – Plan reviewers and permitting staff are required to be qualified individuals, knowledgeable in the technical review of local erosion and sediment control plans and certified as a QSD, or a designated person on staff possesses the Qualified SWPPP Developer (QSD) credential (Brendan, Russ, and Amy).
- Erosion Sediment Control/Storm Water Inspectors – QSD to conduct or supervise plan reviews and Qualified SWPPP Practitioner (QSP) to conduct or supervise inspection operations
- Third-Party Plan Reviewers, Permitting Staff, and Inspectors – Outside parties to review plans and/or conduct inspections (Resource Conservation District (RCD))

SECTION E.10. – CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM

The Construction Site Storm Water Runoff Control Program (CSSWRCP) shall include the development of an enforceable construction site storm water runoff control ordinance for all projects that disturb less than one acre of soil. The West Slope will need to adopt an Ordinance similar to the one in effect for the Tahoe Basin. At a minimum, the ordinance shall include requirements for erosion and sediment controls, soil stabilization, dewatering, source controls, and pollution prevention measures. The CSSWRCP shall also include:

- Construction Site Inventory – An inventory of projects <1 acre shall be maintained throughout the life of the Permit. The inventory for projects >1 acre can be obtained through the State Board's SMARTS database and supplemented as needed.
- Construction Plan Review and Approval Procedures – Prior to issuing a Grading or Building Permit, confirm ESCPs or SWPPPs meet the minimum requirements of the Storm Water Ordinance. The ESCPs or SWPPPs shall include the rationale used for selecting Post Construction BMPs e.g., calculations, a list of applicable permits (401, 404, CGP, etc.), and evidence that all permits have been obtained. Checklist will need to be used throughout the review process and retained.
- Construction Site Inspection and Enforcement – Permittee shall use legal authority through the Ordinance to implement procedures for inspecting public and private construction projects and conduct enforcement as necessary. The Permittee may leverage existing inspection procedures and personnel to conduct construction site inspections and enforcement. At a minimum, inspections must be conducted at priority construction sites prior to land disturbance (1 inspection must occur prior to the rainy season, Oct 15th), during active construction and following active construction (final inspection shall verify all temporary BMPs have been removed).

SECTION E.10. – CONSTRUCTION SITE STORM WATER RUNOFF CONTROL PROGRAM - CONTINUED

Prioritization criteria and inspection frequencies shall be based on project threat to water quality. Project threat to water quality includes:

- Soil erosion potential
- Site slope
- Project size and type
- Sensitivity of receiving water bodies
- Proximity to receiving water bodies
- Non-storm water discharges
- Projects more than one acre that are not subject to the CGP (Erosivity Waiver)
<http://water.epa.gov/polwaste/npdes/stormwater/Rainfall-Erosivity-Factor-Calculator.cfm>
- Past record of non-compliance by the operator of the construction site

SECTION E.12 - POST CONSTRUCTION STORM WATER REQUIREMENTS - 2,500 – 5,000 SF IMPERVIOUS

- Projects that create and/or replace (including projects with no net increase in impervious footprint) between 2,500 SF and 5,000 SF of impervious surface, including detached single family homes that create and/or replace 2,500 SF or more of impervious surface and are not part of a larger plan of development must implement one or more of the following:
 - Stream Setbacks and Buffers
 - Soil Quality Improvement and Maintenance
 - Tree Planting and Preservation
 - Porous Pavement
 - Green Roofs
 - Vegetated Swales
 - Rain Barrels and Cisterns



POST CONSTRUCTION STORM WATER REQUIREMENTS

≥5,000 SF IMPERVIOUS - *REGULATED PROJECT*

- Projects that create and/or replace 5,000 SF or more of impervious surface (Regulated Projects) must implement measures for site design, source control, runoff reduction, storm water treatment and baseline hydromodification management. All Regulated Projects are required to implement LID measures to reduce runoff, treat storm water and provide hydromodification measures.
- Regulated Projects include development projects. Development includes new and redevelopment projects on public or private land that fall under the planning and permitting authority of a Permittee (El Dorado County). Redevelopment is any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a site on which some past development has occurred.
- By the second year of the effective date of Order #2013-0001-DWQ (July 1, 2015), the Permittee shall require these Post-Construction Standards be applied on applicable new and redevelopment Regulated Projects, both private development requiring municipal permits and public projects, to the extent allowable by applicable law.

REGULATED PROJECTS DO NOT INCLUDE:

- Detached single family home projects that are not part of a larger plan of development
- Interior remodels
- Routine maintenance or repair such as: exterior wall surface replacement, pavement resurfacing within the existing footprint
- LUPs – Unless the LUP has a discrete location that has 5,000 square feet or more of newly constructed contiguous impervious surface. When the LUP has a discrete location that has 5,000 square feet or more of new contiguous impervious surface, only that specific discrete location is subject to Permit requirements listed in Section E.12.c
- Redevelopment projects including trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway
- Discretionary projects that have been deemed complete for processing with vesting tentative maps (that have not requested and received an extension of previously granted approvals) prior to the second year of the effective date of Order #2013-0001-DWQ (July 1, 2014)

LOW IMPACT DEVELOPMENT (LID)

- Mimicking Pre-Development Hydrology
- Post Construction BMPs – Infiltration
- Disconnecting Impervious Surfaces
- Important Strategy in CA
- These are Not New concepts



LID STANDARDS FOR DEVELOPMENT - REGULATED PROJECTS

“The Permittee shall adopt and implement requirements and standards to ensure design and construction of development projects achieve the following LID Standards”:

- a. Site Assessment – At the earliest planning stages a site assessment will be required to evaluate how site conditions, such as soils, veg, and flow paths will influence the placement of buildings and paved surfaces
- b. Drainage Management Areas – Provide a map or diagram dividing the developed portions into discrete Drainage Management Areas (DMAs) and manage runoff from each DMA
- c. Numeric Sizing Criteria for Storm Water Retention and Treatment – Volumetric (approx. the 85th percentile 24-hour storm runoff event) and Flow-based criteria (equal to at least 0.2 inches per hour intensity or equal to at least 2 times the 85th percentile hourly rainfall intensity as determined from local rainfall records)
- d. Site Design Measures – To the extent technically feasible, achieve infiltration, evapotranspiration and/or harvesting/reuse of the 85th percentile 24-hour storm runoff event. Any remaining runoff from impervious DMAs may then be directed to bioretention facilities

LID STANDARDS FOR DEVELOPMENT - REGULATED PROJECTS

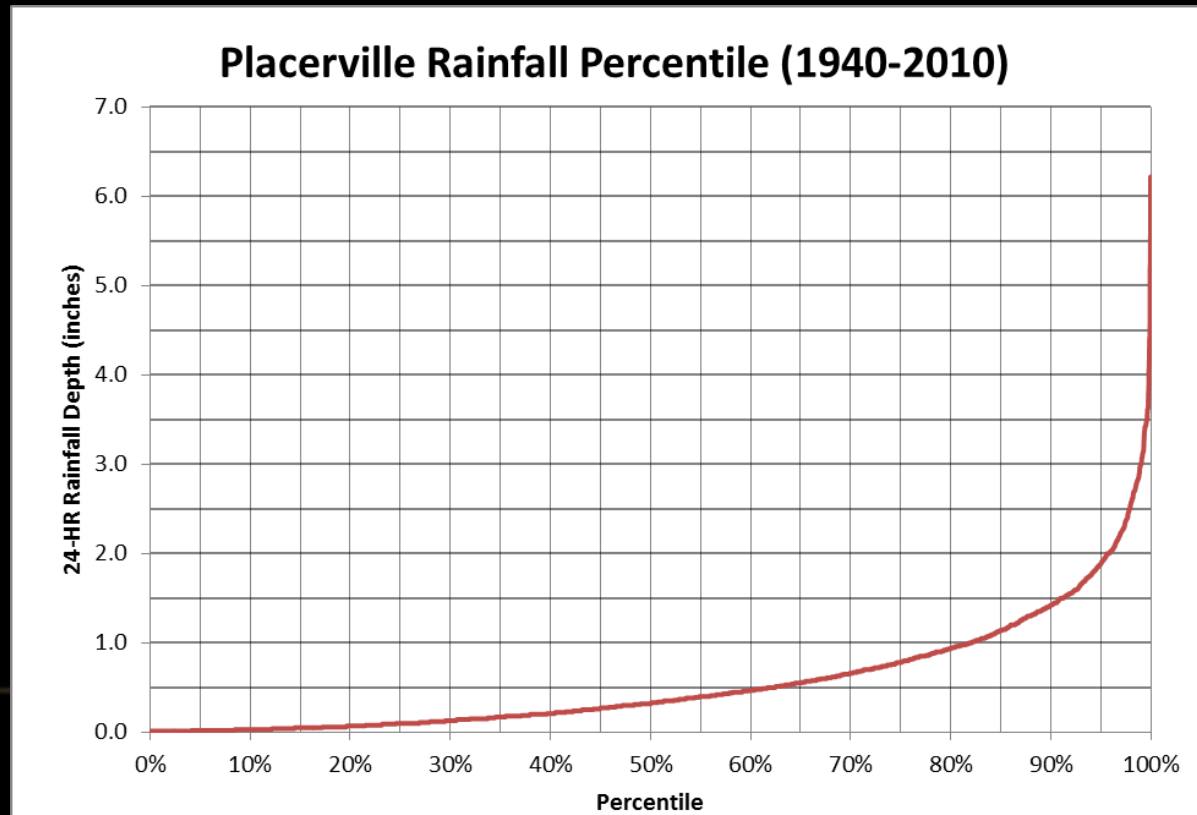
(CONTINUED)

“The Permittee shall adopt and implement requirements and standards to ensure design and construction of development projects achieve the following LID Standards”:

- e. Source Controls – Projects with pollutant-generating activities and sources shall be required to implement standard permanent and/or operation source control measures as applicable (CASQA BMP Handbook for New and Re-development)
- f. Storm Water Treatment Measures and Baseline Hydromodification Management Measures – Remaining runoff from impervious DMAs must be directed to one or more facilities designed to infiltrate, evapotranspire, and/or bioretain runoff to the Volumetric and Flow-based criteria (item c. from previous slide)
- g. Alternative Designs – Facilities, or a combination of facilities, of a different design may be permitted if all of the equivalent measures provided in the Order can be demonstrated
- h. Allowed Variations for Special Site Conditions – Bioretention system adjustments for special conditions listed in the Order
- i. Exceptions to Requirements for Bioretention Facilities – Other types of biotreatment or media filters (such as tree-box-type biofilters or in-vault media filters) may be used for categories of Regulated Projects listed in the Order (ex. Historical sites, sites receiving runoff from adjacent impervious properties and sites located in designated pedestrian-oriented commercial districts)

85% STORM EVENT

- The 85% storm is calculated by taking standard daily rainfall values, removing all records less than one-tenth of an inch, arranging smallest to largest, and finding the value for which 85% of all the values are less.



SPECIFIC REQUIREMENTS FOR REDEVELOPMENT PROJECTS, ROAD PROJECTS AND LUPs

- Where a redevelopment project results in an increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included in the treatment system design to the extent feasible.
- Where a redevelopment project results in an increase of less than 50 percent of the impervious surface of a previously existing development, only runoff from the new and/or replaced impervious surface of the project must be included in the treatment system design.
- Road Projects and LUPs – Projects that create 5,000 square feet or more of newly constructed contiguous impervious surface and that are public road projects and/or fall under the building and planning authority of a Permittee shall comply with Section E.12.e LID standards except that treatment of runoff of the 85th percentile that cannot be infiltrated onsite shall follow U.S. EPA guidance green infrastructure to the extent feasible.

LEGAL AUTHORITY

“Within the second year of the effective date of the permit, the Permittee shall revise relevant ordinances or other regulatory mechanisms, or adopt any new ordinances or other regulatory mechanisms, to obtain adequate legal authority, to the extent allowable under state or local law, to control pollutant discharges into and from, as applicable, its MS4, and to meet the requirements of this Order”

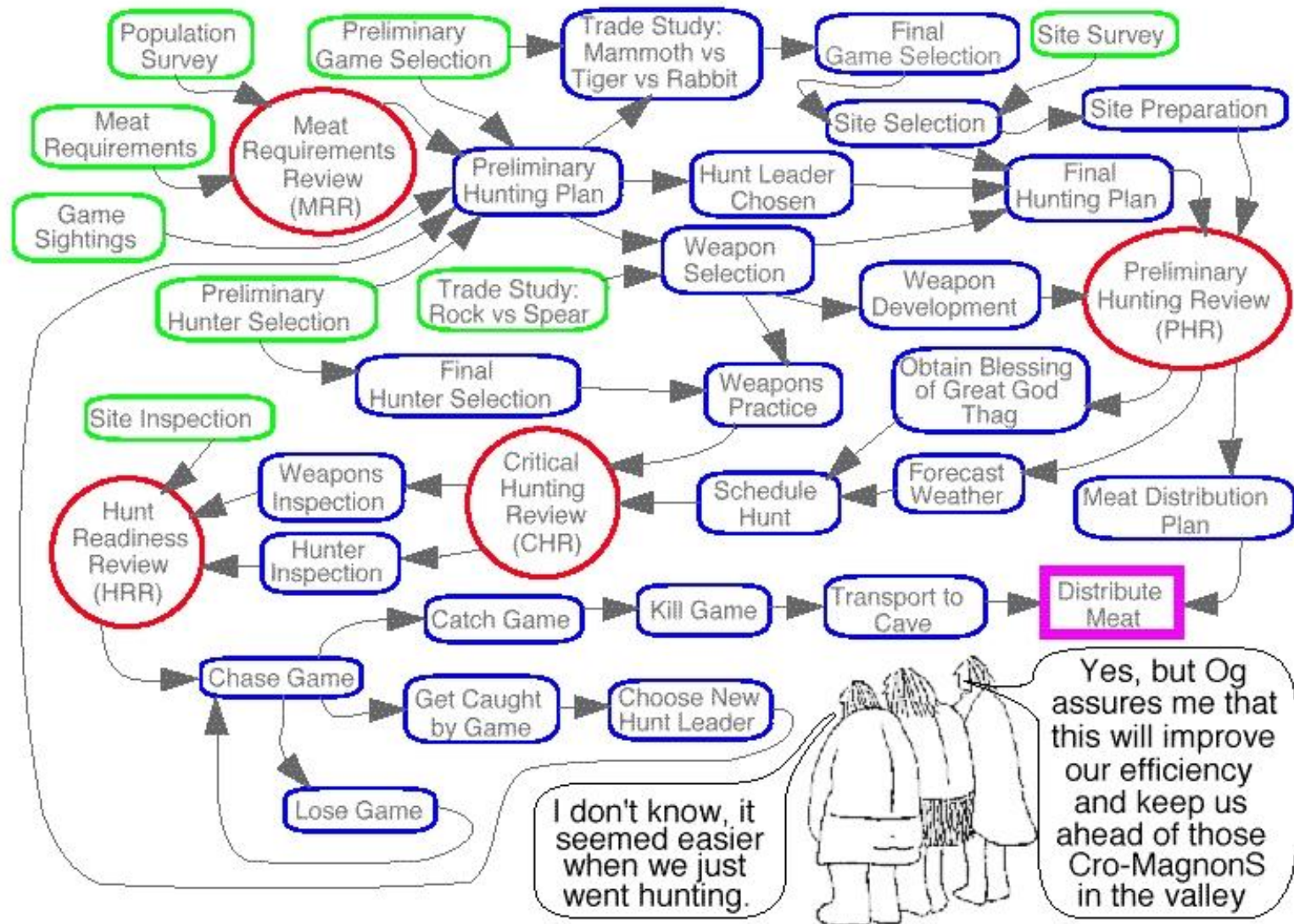
Current El Dorado County Legal Authority:

- Drainage Manual
- Design and Improvement Standards Manual (DISM)
- Grading, Erosion, and Sediment Control Ordinance
- Storm Water Management Plan (SWMP)
- Effective July 1, 2014 California 2013 Green Building Standards Code (Title 24, Part 11)

El Dorado County Updates in Progress:

- Landscape Standard – Will comply with the Water Conservation in Landscaping Act: Model Water Efficient Landscape Ordinance (Gov. Code 65591-65599)
- TGPA-ZOU

NOT OUR GOAL:



Why the Neanderthals became extinct.

OPERATION AND MAINTENANCE VERIFICATION PROGRAM

- Regulated Projects shall require either a signed statement accepting responsibility, written conditions in the sale or lease agreements or deeds, language in lease agreements or deeds, or any other legally enforceable agreement or mechanism that assigns the O&M responsibility of the installed treatment system(s) and hydromodification control(s) to the project owner or the Permittee
- Maintain a database for all Regulated Projects that have installed treatment systems
- On an annual basis, before the wet season, prepare a list of newly installed (installed within the reporting period) stormwater treatment systems and hydromodification management controls to the local mosquito and vector control agency and the appropriate Regional Board

LAKE TAHOE NPDES PERMIT – CONSTRUCTION

- Construction Site Inventory
- Construction Site Outreach
- Construction Site Prioritization and Inspection
- Construction Site Enforcement
- Oversight by Others
- Permittees shall conduct weekly inspections during the construction season of high priority construction projects and construction projects overseen by the Permittee. Medium and low priority sites are inspected at our discretion.
- Inspection Data:
 - Inspector's name
 - Date and time of inspection
 - Field and weather conditions at the time of the inspection
 - Inspection location
 - Observed facility conditions
 - A summary of follow up and enforcement actions taken, if violations are observed.

POTENTIAL SOLUTIONS MOVING FORWARD

- Tap into RCD expertise
 - Storm Water Team assistance
 - LMIS Algorithms
 - Web Tools/Calculation Spreadsheets
(<http://svctenvims.dot.ca.gov/wqpt/wqpt.aspx>)
 - New & Improved Land Management System
 - Field Tablets – Electronic Data
 - Additional Trainings
 - Dedicated Staff Resources
-

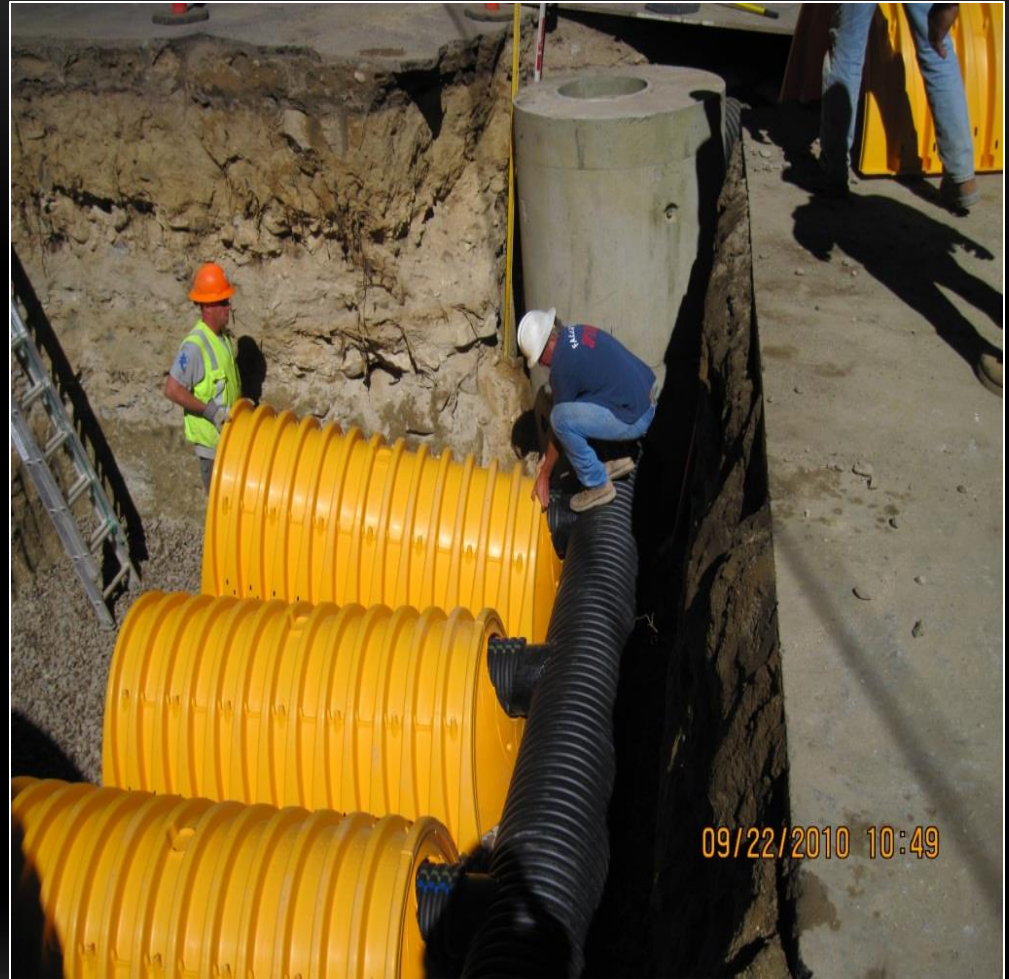
SWALES



BASINS



SUBSURFACE INFILTRATION



SUBSURFACE FILTRATION



* County will need to develop discharge standards

LANDSCAPE BMPS



RAIN GARDENS / MICRO BASIN



Thanks!

