Comparison of Unfunded State Mandates in Proposed Permit With Actual Federal Mandates from EPA-Issued Permits

New and/or Higher Level of Service Mandated in Provision	Is the Provision Mandated By Any EPA-issued Permit?[1]	Unfunded Mandate Analysis
C.3. New Development and Redevelopment		
C.3.b.iii. Green Streets Pilot Project • Permittees must develop 10 "green street" pilot projects that, *inter alia*, incorporate LID techniques, store stormwater for landscaping, "enhance neighborhood livability," include particular parking requirements, provide pedestrian and bicycle access. • Develop a database chronicling progress • Annual extensive narrative reporting on progress of projects.	Albuquerque • No similar mandate • Mandates only that streets be "operated and maintained in a manner to minimize discharge of pollutants" according to practices permittee develops in SWMP (II.A.3; Table III.A.5.e) Boise • No similar mandate • Permittee must only ensure that "the streets for which they have maintenance authority and responsibility are swept as needed to reduce the discharge of pollutants" and address impacts for sanding and deicing activities. (II.A.2.c; II.A.4.) Washington, D.C. • No similar mandate • Practices similar to Boise and Albuquerque Worcester • No similar mandate • Practices similar to others	Effectively, the State is imposing a separate neighborhood beautification program on permittees under the guise of the NPDES MS4 permit, which far exceeds the street-sweeping mandates of the Federal Permits State requirements have no analogs in mandates imposed by federal government, and are burdensome and costly to implement.

[1] To determine whether the federal government actually mandates the disputed provision, this analysis considers whether the provision (or some analogous provision) has actually been imposed by the US EPA in the Phase I MS4 permits it has issued for any of Albuquerque, NM; Boise, ID; Washington, D.C.; or the draft permit proposed for Worcester, MA.

C.3.c. Low Impact Development (LID) Permittees must require all regulated projects to integrate LID into project design, including: • Source Control Requirements – use of sanitary sewers for certain commercial and industrial activities, covers and drains for outdoors storage and fueling areas, properly design trash storage areas, specified landscaping, irrigation systems; • Site Design Requirements – conservation of natural areas and existing trees, minimization of impervious footprint, and proper drainage from impervious areas; and • Stormwater Treatment Requirements – reduce runoff, store stormwater for beneficial reuse, enhanced infiltration, and natural stormwater treatment features like landscape-based bioretention systems. • Notification and "justification" to the Water Board Executive for certain projects, "approval" from Executive for others	Albuquerque • No LID mandate Boise • No LID mandate Washington, D.C. • No similar mandate • Permittee instructed to develop "Low impact development practices such as improved tree boxes, reduced road length and width, use of infiltration trenches, porous pavements, grassy swales and filter strips where appropriate" in its SWMP (II.B.1.) Worcester • Acknowledges existence of *Mass. Department of Environmental Protection* LID practices, but there are no EPA-mandated requirements (I.E.4.c.1.) • Requires permittee to develop a demonstration project "to inform and facilitate the application of groundwater recharge as a low-impact development practice in the city" (I.E.8.)	Federal Permits contain either: no LID mandate at all, flexibility and discretion for the permittee in developing LID techniques, or reference to state-imposed LID techniques. In contrast, this State Permit prescribes detailed and costly requirements that must be implemented by all permittees, which would additionally require amendments to planning and building codes. State is imposing beautification and/or zoning-type programs under the guise of a NPDES MS4 permit. None of the Federal Permits grants ongoing regulatory authority to the permit issuer over projects in permittee's jurisdiction. Compliance would be burdensome and costly.
C.3.g. Hydromodification Management ("HM") • Projects that create more than 1 acre of impervious surface (or replace more than 1 acre of impervious surface where the end result is an increase in impervious surface area) must ensure that run-off from the project does not increase the "erosion potential" of the receiving stream. • Standard can be met only through adoption of 1 of 3 specified HM control measures.	Albuquerque • No similar mandate Boise • No similar mandate Washington, D.C. • No similar mandate Worcester • No similar mandate	None of the Federal Permits even discusses HM control measures, let alone imposes particular control measures on project sites as small as one acre.
C.3.h. Operation and Maintenance of Stormwater Treatment Systems • Development of detailed database of all Regulated Projects that have stormwater treatment systems; • Development of a detailed and prescriptive inspection program of stormwater treatment systems and hydromodification management controls • Elaborate and prescriptive reporting requirements	Albuquerque • No similar mandate for stormwater treatment systems for private development Boise • No similar mandate for stormwater treatment systems for private development Washington, D.C. • No similar mandate for stormwater treatment systems for private development Worcester • No similar mandate for stormwater treatment systems for private development	Federal Permits do not mandate any particular stormwater treatment for new development, let alone the costly and time-consuming development of a detailed database and inspection program for private stormwater treatment efforts.

C.3.i. Required Site Design Measures for Small Projects and Detached Single-Family Home Projects • Permittees must require all development and single-family home projects that create or replace 2,500 to 10,000 square feet of impervious surface to implement at least one of several designs: divert roof runoff into cisterns for reuse; divert roof runoff to vegetated areas; direct paved surface runoff to vegetated areas; install driveways, patios, and walkways with permeable surfaces.	Albuquerque • No similar mandate Boise • No similar mandate Washington, D.C. • No similar mandate Worcester • No similar mandate • Permittee must obtain legal authority to "require the infiltration or injection of storm water from new development or redevelopment sites, where feasible and appropriate," but only for disturbances of 1 acre or more (I.E.1.f.; I.E.4.)	No Federal Permit prescribes particular site design measures for developments as small as that mandated by State Permit. Revision of building and/or planning codes, and implementation and enforcement of state-mandated requirements is costly and burdensome to Permittees.
C.6. Construction Site Control		
C.6.e. Construction Inspections • Permittees must conduct inspections of all construction sites to determine compliance with and effectiveness of six prescribed BMPs • By September 1, Permittees must "remind all sites" >1 acre of upcoming wet season • Inspections must be conducted monthly at all sites >1 acre during the wet season • Permittees must develop a database with which to "track" numerous details for each inspection • Permittees must annually report voluminous detail regarding their inspections of construction sites	Albuquerque • Permittee shall develop and implement a program to reduce runoff from construction sites as part of its SWMP that shall include unspecified inspections of such sites. (II.A.9.) Boise • Permittee instructed to develop a "Construction Site Discharge Control Program" (II.A.10.a.), and to conduct unspecified inspections, "basic information" from which is to be recorded in a database (II.A.10.b-c.) and to annually report certain details of the program (II.A.10.d.) Washington, D.C. • Permittee instructed to develop a management plan for construction sites as part of its SWMP, and to conduct "regular" inspections of such sites (III.B.3.) Worcester • Permittee instructed to develop a management plan for construction sites as part of its SWMP, and to conduct unspecified inspections of such sites (I.E.4.) • Specifically excludes obligation to inspect projects that receive a waiver under the EPA general permit (I.E.4.b.)	The Federal Permits provide Permittees with broad latitude in designing and implementing their own programs for controlling runoff from construction sites, and for inspecting and recording compliance. The State Permit provides no latitude for local discretion, instead dictating particular details of such a program that may be unnecessary or infeasible for some Permittees.

C.8. Water Quality Monitoring		
C.8.b-g. (Various Monitoring Mandates) • Requires financial contribution to develop a new program to monitor the Bay Estuary; • Requires specific monitoring protocol for at least 18 different parameters (consisting of at least 65 separate components to be measured) at dozens of sites, including both MS4 discharges and receiving waters (see Tables 8.1, 8.3, 8.5) • Establishes "triggers" for each of the dozens of parameters in Tables 8.1 and 8.3, that if met, require additional site-specific studies and abatement efforts • Requires permittees to establish and maintain fixed monitoring stations on specified waterbodies (Table 8.4) • Requires permittees to each conduct one stream restoration project or other "geomorphic study" • Requires permittees to "encourage Citizen Monitoring"	Albuquerque • Requires permittee to develop an SWMP that includes monitoring of: all outfalls at least once during permit period; all outfalls to Rio Grande river at least 1 time/year; MS4 discharges from "Type I and II industrial facilities" at a frequency to be "established by the permittee" but at least 1 time/year for 16 separate components (II.A.11.) • Requires monitoring of 31 separate components at 5 outfalls, 3 times/year (except fecal coliform at 10 times/year) (V.A.1; Table V.A.1.a.1.) • Requires monitoring of additional components only biennially, at 5 outfalls, 3 times/year (V.A.1; Table V.A.1.a.2.) • No "triggers" mandating follow-up and abatement Boise • Requires monitoring of 28 separate components at five sites, 3 times/year (IV.A.; Table IV.A.) • No "triggers" mandating follow-up and abatement Washington, D.C. • Requires monitoring of 10 parameters (constituting an unspecified number of separate components) at 6-9 rotating sites, 3 times/year (IV.A.1; Tables 4, 5) • No "triggers" mandating follow-up and abatement Worcester • Requires monitoring of receiving water at 8 sites, 4 times/year (once in each season) for 15 separate components (I.F.3.A.) • Requires monitoring each of its MS4 outfalls on two occasions during the permit term, for 15 separate components (I.F.4.) • No "triggers" mandating follow-up and abatement	The State Permit establishes "triggers" that require costly additional studies and abatement measures, which are not mandated in any of the Federal Permits. The intensity (and associated cost) of the monitoring program under the State Permit is much greater than under any of the Federal Permits, requiring the monitoring of many more parameters at many more sites. The State Permit explicitly requires expenditure to monitor waters not adjacent to the municipalities' jurisdiction; the Federal Permits contain no analogous mandate. The State Permit requires a separate and costly "geomorphic" or stream restoration study not mandated in any of the Federal Permits. The State Permit mandates efforts to encourage Citizen Monitoring not mandated in any of the Federal Permits.

C.9. Pesticides Toxicity Control		
C.9.e. Track and Participate in Relevant Regulatory Processes • Permittees are required to track the evaluation and registration of pesticides by the EPA and the California Department of Pesticide Regulation, and to undertake lobbying efforts directed at those agencies.	Albuquerque • No similar mandate • With regard to pesticides, permittee is only required to limit their application by public employees (II.A.5.); educate the public as to proper use of pesticides (II.A.10); and to conduct biennial monitoring of certain pesticides (Table V.A.l.a(2)) Boise • No similar mandate • With regard to pesticides, permittee is only required to control and reduce the discharge (II.A.6.) and to monitor certain pesticides (IV.A.) Washington, D.C. • No similar mandate • With regard to pesticides, permittee is only required to control and reduce the discharge (III.B.); to conduct public outreach with regard to pesticide application (III.B.12.); and to monitor certain pesticides (IV.A.1.) Worcester • No similar mandate • With regard to pesticides, permittee is only required to conduct public outreach with regard to pesticide application (I.E.2.c.), to limit application of pesticides in by public employees (I.E.2.d.)	The State Permit requires Permittees to undertake costly and time-consuming lobbying and regulatory activities that are not mandated by any of the Federal Permits. The Board is explicitly shifting its Cal. Water Code § 13144 duty to coordinate and consult with other state agencies concerning water quality control onto the permittees.

C.10. Trash Reduction		
C.10.a-d. (Various Trash Control Mandates) • Requires Permittees to install and maintain trash capture devices on a catchment area equal to 30% of Retail/Wholesale Commercial Land. • Requires Permittees to identify and abate dozens of trash "hot spots" • Requires Permittees to conduct twice-yearly monitoring of "hot spots" and associated capture devices	Albuquerque • No mandate for trash/litter capture devices • Permittee required to develop SWMP that includes a "program to reduce the discharge of floatables" (II.A.6.c.); a plan to increase public awareness for purpose of litter source control (II.A.10; Table III.A.5); a program to develop and implement BMPs to control the discharge of floatables, and to consider the use of unspecified "structure controls" (Table III.A.17.) • Permittee required to conduct twice-yearly monitoring of floatables at four sites (IV.B.) Boise • No mandate for trash/litter capture devices • Permittee required to develop SWMP that includes a "program to reduce the discharge of floatables," implement an Adopt-a-Highway program, and sweep streets to control litter (II.A.2) • Permittee required to conduct unspecified monitoring of floatables at two sites, and to clean floatables from existing "removal devices" twice yearly (IV.C.) Washington, D.C. • No mandate for trash/litter capture devices • Permittee required to develop SWMP that includes a "program to further reduce the discharge of floatables" which shall include source controls, and "where necessary," structural controls implement an Adopt-a-Highway program, and sweep streets to control litter (III.B.10) Worcester • No mandate for trash/litter capture devices • Permittee required to secure legal authority to prohibit dumping of, inter alia, trash (I.E.1.b.) • Permittee required to maintain and monitor three existing water separator devices that, among other things, capture floatables (I.F.7.b.)	The State Permit requires Permittees to install costly capture devices that are not mandated by any of the Federal Permits. The State Permit explicitly requires costly and time-consuming abatement of identified "hot spots," which is not required by any of the Federal Permits. The State Permit requires identification and monitoring of many more sites than required by any of the Federal Permits. The State Permit is far more prescriptive and provides none of the flexibility of the Federal Permits, which allow permittees to tailor their trash control programs according to local needs through their SWMPs.

C.11. Mercury Controls		
C.11.a-j. Mercury Control Program • Permittee must facilitate proper collection, recycling, and disposal of mercury-containing devices. • Samples taken in compliance with other provisions must be analyzed for methyl mercury • Permittees must test sediments in storm drains and conveyances—including private property, public rights of way, and stormwater conveyances—to determine mercury concentrations • Permittees must select 5 pilot project sites at which to implement "a suite of abatement measures" and evaluate the success of those projects • Permittees must evaluate ways to enhance existing municipal street sweeping, inlet cleaning, catch basin cleaning, and pump station cleaning via increased effort and/or retrofits at the "pilot scale" on 5 drainages • Permittees must implement a pilot project at 10 locations for installing on-site mercury treatment systems • Permittees must implement 5 pilot projects to divert "dry weather and first flush flows" to the sanitary sewer; evaluate how those efforts reduce mercury in subsequent stormwater discharges • Permittees must develop and implement a monitoring program to quantify mercury loads and reductions achieved through source control, treatment, and management • Permittees must conduct studies to gain a better understanding of fate, transport, and biological uptake of mercury discharged into the Bay • Permittees required to develop and implement programs to reduce mercury impacts on human health, such as subsistence fishers • Permittees are required to develop an "equitable mercury allocation-sharing scheme in consultation with Caltrans"	Albuquerque • no similar mandate to study or remediate mercury or any other specific pollutant Boise • no similar mandate to study or remediate mercury or any other specific pollutant Washington, D.C. • no similar mandate to study or remediate mercury or any other specific pollutant Worcester • no similar mandate to study or remediate mercury or any other specific pollutant	The State Permit requires Permittees to bear the cost and burden of remediation at the pollutant-specific level, which is not mandated by any federal regulation or in any of the Federal Permits. The State Permit requires abatement of mercury on private property, regardless of whether it is actually discharged through Permittees' MS4, something not mandated in any of the Federal Permits. The State Permit requires the diversion of discharges into the sanitary sewer, which is not contemplated by any of the Federal Permits. The State Permit requires extensive study of mercury fate and transport in a complex receiving water that is not directly adjacent to the MS4, a pollutant-specific regional program that has no analogue in the Federal Permits. The State Permit requires municipalities to undertake costly public health programs under the guise of an MS4 permit. Nothing remotely analogous is required by any of the Federal Permits. Via the State Permit, the Regional Board attempts to shift its own workload of devising wasteload allocations for TMDLs onto the Permittees.

C.12. PCB Controls		
C.12.a-i. PCB Control Program • Permittees must implement a program to incorporate the identification of PCBs and PCB-containing equipment into existing industrial inspections • Permittees must develop a plan for sampling PCBs at demolition sites and develop BMPs to reduce or prevent discharges of PCBs at demolition and renovation sites. After BMPs are developed, Permittees must test BMPs at five sites. • Permittees must develop a pilot project to investigate and abate on-land drainages, including private property, public rights-of-way, and stormwater conveyances with accumulated sediments that have elevated PCB concentrations • Permittees must select 5 pilot project sites (including potentially on private property) at which to implement "a suite of abatement measures" and evaluate the success of those projects • Permittees must conduct a pilot project in 5 drainages to evaluate and enhance municipal sediment removal and management practices • Permittees must implement a pilot project at 10 locations for installing on-site mercury treatment systems • Permittees must implement 5 pilot projects to divert "dry weather and first flush flows" to the sanitary sewer; evaluate how those efforts reduce PCBs in subsequent stormwater discharges • Permittees must develop and implement a monitoring program to quantify PCB loads and reductions achieved through source control, treatment, and management • Permittees must conduct studies to gain a better understanding of fate, transport, and biological uptake of PCBs discharged in urban runoff • Permittees required to develop and implement programs to reduce PCB impacts on human health, such as subsistence fishers	Albuquerque • no similar mandate to study or remediate PCBs or any other specific pollutant Boise • no similar mandate to study or remediate PCBs or any other specific pollutant Washington, D.C. • no similar mandate to study or remediate PCBs or any other specific pollutant Worcester • no similar mandate to study or remediate PCBs or any other specific pollutant	The State Permit requires Permittees to bear the cost and burden of remediation at the pollutant-specific level, which is not mandated by any federal regulation or in any of the Federal Permits. The State Permit requires abatement of PCBs on private property, regardless of whether it is actually discharged through Permittees' MS4, something not mandated in any of the Federal Permits. The State Permit requires the diversion of discharges into the sanitary sewer, which is not contemplated by any of the Federal Permits. The State Permit requires extensive study of PCB fate and transport in a complex receiving water that is not directly adjacent to the MS4, a pollutant-specific regional program that has no analogue in the Federal Permits. The State Permit requires municipalities to undertake costly public health programs under the guise of an MS4 permit. Nothing remotely analogous is required by any of the Federal Permits.

C.13. Copper Controls		
C.13.a-e. Copper Control Program • Permittees must enact local ordinances to prohibit the discharge of waste into storm drains from copper architectural features (e.g., copper roofs) and enforce those ordinances • Permittees must require the use if BMPs when issuing building permits • Permittees must adopt and enforce ordinances that prohibit discharges from pools, spas, and fountains that contain copper-based chemicals into storm drains • Permittees must participate in the Brake Pad Partnership and track upcoming decisions regarding brake pad copper content • Permittees must identify industrial sources using copper (e.g., plating facilities, metal finishers, auto dismantlers) and educate industrial inspectors. Inspectors must ensure that proper BMPs are in place to minimize discharges from these sources into storm drains • Permittees must conduct studies to investigate the toxicity of copper sediments	Albuquerque • no similar mandate to study or remediate copper or any other specific pollutant Boise • no similar mandate to study or remediate copper or any other specific pollutant Washington, D.C. • no similar mandate to study or remediate copper or any other specific pollutant Worcester • no similar mandate to study or remediate copper or any other specific pollutant • Permittee only required to investigate and address copper in response to high copper concentrations found at one outfall in past monitoring (I.F.4.e.)	State Permits require Permittees to undertake a variety of costly and time-consuming copper control measures simultaneously with conducting studies to determine whether copper is actually a problematic pollutant in discharge waters. None of the Federal Permits requires a permittee to undertake such measures. The State Permit requires Permittees to engage in costly lobbying efforts unrelated to the discharge of pollutants through their MS4s. Such lobbying activity is not mandated by any of the Federal Permits.

C.14. PBDE, Legacy Pesticides, and Selenium		
C.14.a. Control Program for PBDE, Legacy Pesticides, and Selenium • To determine if urban runoff is a conveyance mechanism associated with the possible impairment of the Bay for PBDEs, legacy pesticides, and selenium, Permittees are required to work with the other stormwater management agencies in the region to implement a plan to identify, assess, and manage controllable sources of those contaminants found in urban runoff, if any • Provide information on pollutants to allow calculation of TMDLs from urban runoff conveyance systems	Albuquerque • aside from basic monitoring program, no similar mandate to study possible pollutants of concern Boise • aside from basic monitoring program, no similar mandate to study possible pollutants of concern Washington, D.C. • aside from basic monitoring program, no similar mandate to study possible pollutants of concern Worcester • aside from basic monitoring program, no similar mandate to study possible pollutants of concern	The State Permit shifts the State's workload onto the Permittee to determine whether the substances need to be regulated. The Federal Permits recognize that permittees are bound by TMDLs, but do not mandate that permittees assist states in developing TMDLs.
C.15. Exempted and Conditionally Exempted Discharges		
C.15.a. Exempted Non-Stormwater Discharges • The following unpolluted discharges are exempted from prohibition of non-stormwater discharges: flows from riparian habitats or wetlands, diverted stream flows, flows from natural springs, rising ground waters, uncontaminated groundwater infiltration, and NPDES permitted discharges **C.15.b. Conditionally Exempted Non-Stormwater Discharges** • Describes a tiered categorization of non-stormwater discharges, based on potential for pollutant content, which may be discharged upon adequate assurance that the discharge does not contain pollutants of concern at concentrations that will impact beneficial uses or cause exceedances of water quality standards • The following non-stormwater discharges are exempted from the prohibition of non-stormwater discharges if they are identified by the Permittees as not being sources of pollutants to receiving waters or if appropriate control measures to eliminate adverse impacts are implemented: (1) pumped groundwater, foundation drains, water from crawl space pumps, and footing drains; (2) air conditioner	Albuquerque • Permittee to address exempt discharges in development of SWMP, "to describe local controls or conditions on discharges exempted from the prohibition on non-storm water. For each category the permittees described as exempt, submit an explanation as to why the discharges are not reasonably expected to be significant sources of pollutants" (Table III.A.8) • Permittee to designate exempt discharges so long as those discharges are "not [ ] reasonably expected (based on information available to the permittees) to be significant sources of pollutants" (II.A.6.) Boise • Provides that a list of discharges almost identical to those in C.15.a-b of the State Permit, "need not be addressed by co-permittee's illicit discharge and improper disposal program," "[u]nless identified by any co-permittee, IDEQ, or the Water Office Director, as sources of pollutants to waters of the United States" (II.A.7.) Washington, D.C. • Provides that "Nothing in this permit prohibits [a list of discharges almost identical to those in C.15.a-b of the State Permit] when properly managed so that water quality is not impaired" (I.B.)	The Federal Permits simply permit these types of non-storm discharges unless there is an affirmative showing that they are sources of pollution. In contrast, the State Permit prescribes detailed and costly efforts, monitoring, and reporting that must be taken for each separate constituent, regardless of whether it is known or suspected of being problematic.

condensate; (3) planned, unplanned, and emergency discharges from the potable water system; (4) swimming pools, hot tubs, spas, fountain waters; and (5) water used for irrigation or gardening. • Requires discharge benchmarks and water quality monitoring for planned and unplanned discharges from the potable water supply, including drinking water, hydrant flushing, and line breaks. Affects all water retailers • For most of the five types of discharge described above, the Permit requires prescriptive BMPs and control measures, including: (1) treatment (including filtration) before discharge to remove pollutants (including total suspended solids and silt), compliance with existing effluent limitations, detailed and frequent monitoring, turbidity reduction, and maintenance of neutral pH; (2) discharge of condensate to the ground or sanitary sewer; (3) dechlorination, erosion and sediment control measures, notification of planned discharges, monitoring of planned and unplanned discharges for pH, chlorine, and turbidity, reporting of unplanned and emergency discharges, plugging of storm drain collection system and proper disposal for emergency discharges; and (4) disposal of discharge from pools and spas to the sanitary sewer unless properly dechlorinated • Imposes extensive reporting requirements down to the level of individual exempt discharges	Worcester • Provides that "[t]he following non-storm water discharges [listing discharges almost identical to those in C.15.a-b of the State Permit] need not be addressed by the Permittee unless determined by the Permittee, EPA, or MassDEP to be significant contributors of pollutants" (I.A.3.)	