

BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

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| In re: |) | |
| |) | |
| Joint Base Lewis-McChord Municipal |) | |
| Separate Storm Sewer System |) | NPDES Appeal No. 13-09 |
| |) | |
| United States Department of the Army, Joint |) | |
| Base Lewis-McChord, <i>Permit Applicant</i> |) | |
| |) | |
| NPDES Permit No. WAS-026638 |) | |
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**BRIEF OF AMICUS CONSERVATION GROUPS IN
OPPOSITION TO PETITION FOR REVIEW**

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INTRODUCTION

Amicus organizations Puget Soundkeeper Alliance, Washington Environmental Council, Natural Resources Defense Council, American Rivers, and Sierra Club¹ respectfully submit this *amicus* brief in opposition to the U.S. Department. of the Army's ("Army's") Petition for Review of the stormwater permit issued for Joint Base Lewis-McCord ("JBLM").

Puget Sound is one of the nation's most ecologically and commercially significant waterways, a shared home to iconic protected species like chinook salmon and orcas as well as millions of citizens. Countless analyses have demonstrated that the Sound is slowly dying, a result of decades of pollution and habitat degradation. One of the most significant threats to the Sound's health is stormwater runoff from roofs, roads, and other developed surfaces in the watersheds comprising the Sound. The State of Washington, subsequent to successful litigation by some of the amici groups and an extensive multi-year technical process, has set an improved standard for reducing stormwater runoff, via Clean Water Act National Pollutant Discharge Elimination System ("NPDES") permits, on over 100 large and small jurisdictions throughout Western Washington.² EPA carefully evaluated the state's efforts and adopted many of its technical standards in its own permit for JBLM. Those technical requirements are supported by an extensive administrative record and are necessary to achieve standards imposed by both the Clean Water Act ("CWA") as well as the Endangered Species Act ("ESA"). The Army's arguments to the contrary are based on an acute misunderstanding of the law, ignorance of the special situation in Puget Sound, and a profound disregard of the extensive record underlying

¹ Sierra Club was not among the original list of amici applicants approved by the EAB on January 13, 2014, but seeks to join this brief. Several Sierra Club members in Washington submitted comments on the draft JBLM permit.

² JBLM is within and contiguous to a number of those state-permitted jurisdictions, notably Pierce County and Tacoma. JBLM shares watersheds with those permittees. *See, e.g.*, ER 9 p. 4-1 and ER 9 p. 9-17.

EPA's ten-year development of this permit. The permit should be upheld in its entirety.

ARGUMENT

The burden in this case rests with the Army. The Army must demonstrate that EPA's decision is clearly erroneous. 40 C.F.R. § 124.19(a)(4)(i); *Three Mountain Power, LLC*, 10 E.A.D. 39, 47 (EAB 2001). The burden is particularly heavy in reviewing EPA's technical decision, where the EAB will defer to EPA's expertise and will uphold decisions that are rational and supportable. *In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001). The Army has failed to carry its burden here.

I. STORMWATER POLLUTION IS A CRITICAL PROBLEM IN PUGET SOUND AND NATIONALLY.

A. Polluted Stormwater Runoff Is a Key Factor in the Sharp Decline of Puget Sound and Western Washington's Rivers and Streams.

Municipal stormwater—runoff of rain and snowmelt from roads, structures and hard surfaces—is the largest and fastest growing threat to water quality in Western Washington, as well as many other parts of the country. *Puget Soundkeeper Alliance v. Ecology*, 2008 WL 5510412 (Wash. PCHB Aug 7, 2008) (“*PSA I*”), at *12 (“Stormwater is the leading contributor to water quality pollution in the state's urban waterways, and is considered to be the state's fastest growing water quality problem as urbanization continues to spread throughout the state.”)³; *Envtl. Def. Ctr. v. EPA*, 344 F.3d 832, 840 (9th Cir. 2003) (“*EDC*”) (“Stormwater runoff is one of the most significant sources of water pollution in the nation, at times ‘comparable to, if not greater than, contamination from industrial and sewage sources’”).

Stormwater carries large loads of toxic pollutants like heavy metals, oil and grease, pesticides, and organic compounds that degrade water quality and impair beneficial uses.

³ AR 113. Amici adopt EPA's citation conventions of “AR” for Administrative Record and “ER” for Excerpts of Record.

Stormwater also commonly carries heavy loads of “conventional” pollutants (e.g., increased temperature, pH, low dissolved oxygen, and turbidity). 64 Fed. Reg. 68722, 68724 (Dec. 8, 1999). In Western Washington, some stormwater pollutants, even at extremely low levels, have been shown to impair survival of species like salmon. For example, stormwater pollutant loads cause returning adult salmon to die within one to two hours of entering a stream.⁴ Mapping and modeling work in the Puget Sound demonstrate that high salmon mortality is predicted to coincide with developed areas.⁵ Research further shows that when impervious surfaces cover as little as 5 percent of a watershed, aquatic insect and freshwater fish diversity declines significantly, and “[m]arked habitat degradation occur[s] at 8 to 10 percent total impervious area.”⁶ Stream quality diminishes when impervious cover exceeds 10 percent and becomes “severely degraded” beyond 25 percent.⁷ *See also* 64 Fed. Reg. at 68724 (“Studies reveal that the level of imperviousness in an area strongly correlates with the quality of the nearby receiving waters.”).

Municipal stormwater can be difficult to manage because of the variable nature of storm events and because most existing conveyance systems (i.e., storm sewers) were not built with water quality protection in mind. *PSA I* at *11. Historically, stormwater managers were

⁴ Scholz NL, Myers MS, McCarthy SG, Labenia JS, McIntyre JK, et al. (2011) Recurrent Die-Offs of Adult Coho Salmon Returning to Spawn in Puget Sound Lowland Urban Streams. *PLoS ONE* 6(12): e28013. doi:10.1371/journal.pone.0028013 (*see* Attachment 1).

⁵ Feist BE, Buhle ER, Arnold P, Davis JW, Scholz NL (2011) Landscape Ecotoxicology of Coho Salmon Spawner Mortality in Urban Streams. *PLoS ONE* 6(8): e23424. doi:10.1371/journal.pone.0023424 (*see* Attachment 2).

⁶ Earl Shaver et al., North American Lake Management Society, *Fundamentals of Urban Runoff Management: Technical and Institutional Issues* 4-95, 4-98 (2007), available at [http://www.deq.state.ms.us/mdeq.nsf/pdf/NPS_FundamentalsofUrbanRunoffManagement/\\$File/Fundamentals_full_manual_lowres.pdf](http://www.deq.state.ms.us/mdeq.nsf/pdf/NPS_FundamentalsofUrbanRunoffManagement/$File/Fundamentals_full_manual_lowres.pdf). ER 13.

⁷ Center for Watershed Protection, *Impacts of Impervious Cover on Aquatic Systems I* (2003), available at http://clear.uconn.edu/projects/TMDL/library/papers/Schueler_2003.pdf. (*see* Attachment 3 excerpts (cover, table of contents, and Chapter 1 pp. 1-20)).

primarily concerned with the problem of stormwater-related flooding and sought ways to address runoff after it had been generated, rather than focusing on prevention and onsite management. Fortunately, this has changed markedly. There is now a broad scientific and regulatory consensus that the traditional “end of pipe” engineering-based approaches are inadequate to protect water quality and beneficial uses, and that effective stormwater management requires prevention of runoff in the first place, through improved “low-impact development” (“LID”) practices, protection of native soils and vegetation, and onsite infiltration. *PSA I* at *19-20; *Puget Soundkeeper Alliance v. Ecology*, 2008 WL 5510413 (Wash. PCHB Aug. 7, 2008) (“*PSA II*”), at *13 (MEP requires application of techniques to “minimize or prevent entirely the discharge of stormwater”).⁸

B. Federal Law Gives EPA Both the Authority and the Obligation to Require All “Practicable Measures” to Protect Water Quality.

All NPDES permits, including MS4 permits, must contain effluent limitations for pollutants in point source discharges. 33 U.S.C. § 1342(a). Those permit conditions include limits based on control technology as well as any more stringent limitations necessary to meet water quality standards. 33 U.S.C. § 1311(b)(1). The technology-based standard for MS4s is contained in § 402(p) of the CWA, which states that MS4s “shall require controls to reduce the discharge of pollutants to the maximum extent practicable” (hereinafter, the “MEP” standard). 33 U.S.C. § 1342(p)(3)(b)(iii); *see also* 40 C.F.R. § 122.34(a). *Defenders of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 131 (D.D.C. 2001) (The statute “imposes a clear duty on the agency to fulfill the statutory command to the extent that it is feasible or possible”) (internal citations omitted); *see also Friends of Boundary Waters Wilderness v. Thomas*, 53 F.3d 881, 885 (8th Cir. 1995) (“feasible” means “physically possible”). While the term “practicable” is not defined in

⁸ ER 19.

the municipal stormwater context, “practicable” as used in a different section of the Clean Water Act has been defined as meaning that technology is required unless the costs are “wholly disproportionate” to pollution reduction benefits. *Rybachek v. EPA*, 904 F.2d 1276, 1289 (9th Cir. 1990).

Critically, it is the responsibility of the permitting authority—not the permittee—to determine the level of pollutant control that will meet the MEP standard. *EDC*, 344 F.3d at 855-56. EPA must include specific requirements in MS4 permits that will result in the reduction of pollutant discharges to the MEP. *Id.* As the Ninth Circuit held in *EDC*, this responsibility may not be delegated to the permittee, as there is a risk that an MS4 operator might “misunderstand[] or misrepresent[] its own stormwater situation and propos[e] a set of minimum measures for itself that would reduce discharges by far less than the maximum extent practicable.” *Id.* The Washington Pollution Control Hearings Board has echoed and adopted this concept in its decision that Low Impact Development is MEP in Washington. *PSA I* at *19-20.

NPDES permits must also contain water quality-based effluent limitations as needed to ensure compliance with water quality standards. 40 C.F.R. § 122.44(d)(1)(i). This Board has held that this requirement applies to MS4 permits. *In re Government of the District of Columbia Municipal Separate Storm Sewer System*, 10 E.A.D. 323, 329, 335-43 (EAB 2002) (requiring “imposition of conditions [that] ensure compliance with the applicable water quality requirements of all affected states”) (emphasis in original). Similarly, the U.S. Ninth Circuit Court of Appeals held that EPA has the discretion to impose additional requirements—i.e., beyond what is “practicable”—where necessary to protect water quality. *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999). As EPA observed in promulgating the Phase II stormwater rules:

Any NPDES permit issued under today's rule must, at a minimum, require the operator to develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from a regulated system to the MEP, to protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act (see MEP discussion in the following section). *Absent evidence to the contrary*, EPA presumes that a small MS4 program that implements the six minimum measures in today's rule does not require more stringent limitations to meet water quality standards. Proper implementation of the measures will significantly improve water quality. As discussed further below, however, *small MS4 permittees should modify their programs if and when available information indicates that water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program*. If the program is inadequate to protect water quality, including water quality standards, then the permit will need to be modified to include any more stringent limitations necessary to protect water quality.

64 Fed. Reg. at 68752 (emphasis added); *see also id.* at 68788 ("EPA disagrees that section 402(p)(3) divests permitting authorities of the tools necessary to issue permits to meet water quality standards.... In cases where adequate information exists to develop more specific conditions or limitations to meet water quality standards, those conditions or limitations are to be incorporated into stormwater permits, as necessary and appropriate."). The CWA contemplates that permitting authorities will impose "increasingly stringent requirements" on Phase I and II jurisdictions under the stormwater permitting program. *Rosemere Neighborhood Ass'n v. Clark Cnty*, 2011 WL 62921, *19 (Wash. PCHB Jan. 5, 2011).

EPA's obligations under the CWA to use all "practicable" approaches to reduce stormwater and protect water quality are compounded by additional duties imposed by the federal Endangered Species Act ("ESA"). Under the ESA, EPA is obligated to ensure that its actions (which include issuance of pollution discharge permits) do not jeopardize the existence or adversely modify the critical habitat of federally listed species. 16 U.S.C. § 1536(a)(2). This substantive duty is discharged in part through a process of interagency consultation with the expert wildlife agency, in this case, the National Marine Fisheries Service ("NMFS"). Because

listed salmonid species are affected by JBLM's discharges, EPA consulted with NMFS to ensure that the ESA's stringent substantive standards were satisfied. ER 83. NMFS found concentrations of pollutants in JBLM's stormwater discharges at or above biological thresholds known to cause harm to salmonids, but concluded that the permit requirements satisfied the standards of the ESA. The weakening of permit standards sought by the Army in this appeal would not be permissible if the result was a violation of the ESA's substantive standards.

C. Reducing Runoff Volumes Through Low Impact Development Techniques Is the Most Effective Approach to Reducing Stormwater Pollution.

There is now a broad consensus among regulators, stormwater experts, and even the development community that reducing runoff volumes from developed land is the most effective way to reduce stormwater pollution. In promulgating the Phase II rules, EPA concludes that "prior planning and designing for the minimization of pollutants in stormwater discharges is the most cost-effective approach to stormwater quality management." 64 Fed. Reg. at 68759. The National Research Council ("NRC") has stated, "A primary goal of stormwater management is to reduce the volume of runoff from impervious surfaces."⁹ Because greater runoff volumes lead to more pollution, reducing stormwater runoff by retaining it on-site can dramatically reduce pollutant loads from development. *Id.* at 9. On-site retention of stormwater prevents 100% of the pollutants in the retained runoff from mobilizing and reaching receiving waters. The NRC recommends that stormwater management efforts focus on maintaining the pre-development hydrology of a site—the natural conditions that existed prior to any development occurring there. *Id.* at 119. Citing the NRC's findings, EPA's agency-wide national policy is that MS4 permit

⁹ National Research Council, *Urban Stormwater Management in the United States* at 371 (2009), available at http://www.nap.edu/catalog.php?record_id=12465. ER 20.

conditions should be “based on maintaining or restoring predevelopment hydrology.”¹⁰ This is consistent with multiple other studies and reports throughout government and academia.¹¹

EPA has drawn from and built on this broad consensus that the most effective method of reducing runoff pollution is a suite of practices collectively known as “low impact development” (LID). LID focuses on management of runoff as close as possible to its source, maintaining as much of a site’s natural hydrology as possible, using both site design (for example, the use of fewer impervious surfaces) and infiltration practices like rain gardens, porous pavement, and grass swales. 40 C.F.R. § 122.34(b)(5)(iii); 64 Fed. Reg. at 68759 (emphasizing “minimization of impervious areas, maintenance or restoration of natural infiltration, wetland protection, use of vegetated drainage ways and use of riparian buffers have been shown to reduce pollutant loadings in stormwater runoff from development areas”). These practices can be integrated into the design of a newly developed or redeveloped site in the first instance, or can be integrated into an existing developed site by retrofitting. According to the National Research Council, many studies have “clearly documented” a greater reduction in runoff from developments that employ LID compared to those that do not. *Id.* at 395. Additionally, EPA has found that, “[i]n the vast majority of cases,” implementation of LID is more affordable for property owners than traditional stormwater management practices that rely on curbs, gutters, pipes, and other hard

¹⁰ U.S. EPA, *MS4 Permit Improvement Guide* at 51 (2010), available at http://www.epa.gov/npdes/pubs/ms4permit_improvement_guide.pdf. ER 30.

¹¹ See, e.g., “Innovative Approaches for Urban Watershed Wet-Weather Flow Management and Control: State-of-the-Technology, Interim Report,” U.S. Environmental Protection Agency, National Risk Management Research Laboratory, Cincinnati, OH (2009) available at <http://nepis.epa.gov/Adobe/PDF/P1005IJS.pdf>; U.S. Environmental Protection Agency (USEPA), “Managing Wet Weather with Green Infrastructure Action Strategy,” USEPA, Washington, DC (2008) (ER 21); U.S. Environmental Protection Agency (USEPA), “Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices,” USEPA, Nonpoint Source Control Branch, Washington, DC (2007) (AR 97) (see Attachment 4).

infrastructure.¹²

EPA has also drawn on state administrative board decisions finding LID to be required to achieve the MEP standard, particularly in Puget Sound. In a challenge to the 2007 Western Washington stormwater permits, after an extensive hearing involving weeks of testimony from many fact and expert witnesses, the Washington Pollution Control Hearings Board (the “PCHB”) found that traditional structural engineered stormwater management practices are, on their own, inadequate to address municipal stormwater pollution and that the use of LID techniques for the reduction and control of stormwater pollutants at the site, parcel and subdivision level is *a necessary requirement of the permit* in order to meet the MEP requirements of federal law. *PSA I* at *12, *18, *26-27 (emphasis added). The PCHB found that the concept of LID is “well-established,” and that the various best management practices or particular techniques comprising LID are “well-defined,” including retention of native vegetation and relying on soil and plants to remove pollutants, such as through bioretention/rain gardens, swales, green roofs, or porous pavement. *Id.* at *14. The PCHB found LID is often less costly than traditional methods of addressing stormwater pollution, while in contrast the cost of not expanding the application of LID stormwater control techniques to manage municipal stormwater were “very high” quoting well-documented evidence that water quality impairment associated with stormwater runoff is a land-use problem that cannot be mitigated if addressed only at the site-level. *Id.* at *18 and *20. The PCHB concluded that there is “no dispute” that a combination of *aggressive use of LID techniques*, coupled with best conventional engineering techniques and land use action to *preserve a high percentage of native land cover*, are “necessary to reduce pollutants in

¹² U.S. EPA, *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices* at iii (2008), available at http://water.epa.gov/polwaste/green/upload/2008_01_02_NPS_lid_costs07uments_reducingstormwatercosts-2.pdf. AR 97.

stormwater to the maximum extent and to preserve water quality.” *Id.* at *18. In short, the PCHB found that “[r]equiring municipalities to impose parcel and subdivision-level LID best management practices represents a cost-effective, practical advancement in stormwater management.” *Id.*

Notably, one of the more robust practitioners of LID and post-construction stormwater controls is the United States Department of Defense. The Department of Defense’s 2004 manual for implementation shows that low impact development can be successfully utilized to attenuate the impacts of stormwater pollution, often at less cost than conventional techniques.¹³ After direction from Congress in the Energy Independence and Security Act (“EISA”) section 438 imposing stormwater requirements on federal facilities and EPA issuance of technical guidance to aid compliance, ER 90, the Department updated its Manual to incorporate those specific requirements.¹⁴ As part of its application for the permit here, the Army included a memorandum describing its intended plan of compliance with EISA 438 consistent with the Technical Guidance. ER 39.

II. EPA HAS BOTH THE AUTHORITY AND THE OBLIGATION TO INCLUDE PRESCRIPTIVE POST-CONSTRUCTION STORMWATER MANAGEMENT REQUIREMENTS IN THIS PERMIT.

Against the backdrop of MEP requirements in federal law and state decisions, and a wealth of scientific information regarding the effectiveness of LID, the Army raises only a series of generalized complaints about the JBLM permit, mostly focused on the Army’s belief that the permit is too prescriptive. Its complaint has no basis in the law and no support in the record.

¹³ U.S. Department of Defense. Design: Low Impact Development Manual, U.S. Department of Defense, Washington, DC (2004; supplemented and updated November 2010); updated version available at http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf. ER 30.

¹⁴ See, http://www.wbdg.org/ccb/DOD/UFC/ufc_3_210_10.pdf.

A. EPA's Authority and Phase II Rules Contemplate Stormwater Controls That Minimize Stormwater Runoff.

The CWA imposes on EPA a duty to require “controls” that will reduce stormwater to the MEP and, where necessary, protect water quality. The CWA requires EPA to issue permits with controls designed to “reduce the discharge of pollutants to the MEP, including management practices, control techniques and system, design and engineering methods, *and such other provisions as the Administrator ... determines appropriate for the control of such pollutants.*” 33 U.S.C. § 1342(p)(3)(B)(iii) (emphasis added). While the Army complains about the inclusion of prescriptive post-construction standards in the permit, such standards are in fact precisely what EPA had in mind in laying out the Phase II stormwater rules. EPA emphasized the nonstructural, LID-oriented approach, noting that “measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious area, and source control measures...” were the most effective ways to address stormwater runoff. 64 Fed. Reg. at 68760. And while the Army seeks to manufacture a gulf between the Phase I and Phase II standards, the opposite is true: EPA specifically observed that its Phase II rule was intended to be “consistent” with post-construction management standards for Phase I permittees. *Id.* EPA’s Phase II rules consistently reaffirm that while the six minimum measures were presumed to be sufficient to protect water quality, additional measures would be *required* where site-specific information demonstrated that this wasn’t the case. *See, e.g.*, 64 Fed. Reg. at 68789.

In laying out the MEP standard in the rules, EPA was explicit that it was adopting a nationwide standard that allowed for consideration of unique local situations—for example the special situation in outstanding resource waters like Puget Sound—as well as local watershed planning processes. 64 Fed. Reg. at 68754. “EPA envisions that this evaluative process [of

determining MEP for a given jurisdiction] will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan.”

Id. That is exactly what EPA did here. Puget Sound is a nationally significant resource—home to federally protected species, important federal treaty obligations, and commercially valuable fisheries and shellfish industries that require clean water. It is governed by state-federal-tribal partnerships and broadly accepted cleanup and protection plans. EPA’s determination to include protective post-construction flow standards is allowable under the law and supported by the record.¹⁵

In short, the national regulations set a generally applicable standard that must be applied in different situations and translated into site-specific requirements. EPA’s duty is to define MEP and other standards and impose them in a site-specific permit. Certainly, there is no prohibition on prescriptive terms in a Phase II MS4 permit. *Envtl. Def. Ctr., Inc. v. EPA*, 344 F.3d 832, 854 (9th Cir. 2003) (“general permits issued under Phase II will ordinarily contain numerous substantive requirements, just as did the permits under Phase I.”). While *amici* have supported revisions to EPA’s national stormwater regulations, the fact that the Agency’s process to do so is not yet complete does not mean that the permitting is locked into outdated standards and approaches to stormwater regulation. To the contrary, the regulations explicitly define an iterative process where continually advancing technology and understanding of water quality result in ever more effective permits until the CWA’s broad goals of restoring water quality are

¹⁵ The Army makes much of the fact that this is its “first” MS4 permit, but offers no legal support for its view that this should relieve the Army of meeting the MEP standards in the law. The Army readily admits that JBLM has been implementing stormwater programs for well over a decade, and many of its programs are already closely aligned with the permit. Petition at 20. Given the fact that a decade passed between the Army’s application and EPA’s issuance of the permit—a decade spent in back-and-forth on the appropriate standards for the permit—the Army’s accusation that EPA has “provided no opportunity” to evaluate the merits of LID practices is nonsensical. *Id.*

achieved. The JBLM permit appropriately sets an MEP standard and requirements that conform to current science and law.

B. The Record Fully Supports Use of LID Requirements Based on the State's Extensive Work in Developing Similar Standards.

An extensive administrative record reveals that EPA considered the issues closely, in consultation with the state which has particular experience and expertise on these questions. The record provides a more than ample basis to conclude that the permit's controls were required in order to satisfy the MEP requirements and protect water quality.

Over 100 jurisdictions in Western Washington, representing diverse landscape situations, divergent capacities, and a huge range of populations, are all required to achieve essentially the same standards as those imposed on JBLM, through application of the 2012 Phase I and II permits for Western Washington by the state Department of Ecology. As noted above, these standards were adopted after the state PCHB found that implementation of LID techniques to reduce stormwater flow were necessary to meet the MEP and state standards, *PSA I* at *19-20, and after the state conducted a multi-year technical and policy process to define appropriate CWA standards. *See, e.g.*, ER 32; 70-73 (public notice copy of permit and response to comments); AR 140, 153, 514, 159, 160, 165, 194, 206, 218. It would be difficult to find more compelling evidence that these standards are "practicable" than the fact that they are the product of a years-long process at the state level and are already in use in virtually every jurisdiction in Western Washington, most with far fewer resources available than the U.S. Army, including jurisdictions surrounding and sharing watersheds with JBLM, like Pierce County, Seattle, and Tacoma. A weaker standard, virtually by definition, does not satisfy the CWA's MEP standard.

The Army disregards the extensive technical work and public process involved in the state's permits and instead complains that the state's technical guidance (specifically, the

Stormwater Management Manual for Western Washington (“the Washington Manual”) referenced in the JBLM permit is “unpromulgated” and “unenforceable.” Petition at 16. This claim is particularly puzzling. The current iteration of the Washington Manual grew out of years of research (and has been challenged repeatedly in litigation), and has benefitted from a technical advisory group that included the leading stormwater researchers in the state of Washington.¹⁶ After extensive public input and review, the Washington Manual has been incorporated into both the Phase I and Phase II general stormwater permits.¹⁷

Equally mysterious is the Army’s accusation that EPA has not provided a factual basis that the manual constitutes MEP. To the contrary, there are thousands of pages of administrative record documentation that support precisely that conclusion, starting with the State’s determination that such standards were necessary to comply with the MEP standard. Additionally, the Army already has an obligation to meet mostly similar technical standards under EISA and has publicly stated that it will comply with them, undercutting its own arguments regarding the supposed impracticability of the requirements. ER 39. In fact, the Army concedes that the state stormwater manual is an “outstanding resource.” Army Petition at 24. The Army has failed to satisfy its burden of proof, under which the Army must demonstrate that EPA’s findings or conclusions are “clearly erroneous.” 40 C.F.R. § 124.19(a)(1).

¹⁶ Public Comments Received on the Draft Washington Manual (Nov. 4, 2011 to February 3, 2012) *available at* <http://www.ecy.wa.gov/programs/wq/stormwater/wwstormwatermanual/2012draft/SWMMWWcomments.html>, *see also* Response to Comments on the 2012 Stormwater Management Manual for Western Washington Department of Ecology (Aug. 1, 2012) *available at* <http://www.ecy.wa.gov/programs/wq/stormwater/wwstormwatermanual/2012draft/comments/2012Response.pdf>.

¹⁷ 2012 Phase I Permit at S5.C.7(b)(i) (page 25), S5.C.9(a) (page 31), S6.D.6(a)(i) (page 44), S6.E.6(a)(ii) (page 50) and S6.E.7(c) (page 52). 2012 Phase II Permit at S5.C.3(b)(v) (page 22), S5.C.4(c)(ii) (page 27), S5.C.5(a) (page 31), S5.C.5(d) (page 32) and S6.D.6(a)(i) (page 41).

C. The Permit and Guidance Give Ample Flexibility Without Allowing Prohibited “Self-Regulation”.

The Army is simply wrong that the permit and the guidance accompanying it are overly prescriptive. To the contrary, both provide considerable flexibility to achieve protective standards and authorize variances or departures where conditions require it.

The primary focus of the Army’s petition is its apparent belief that the Phase II regulations implementing § 402(p) of the CWA envision more permittee-determined requirements. However, the Army’s argument ignores the fact that several key provisions in the Phase II regulations—the ones that essentially allowed for permittees to define MEP for themselves without adequate permitting authority oversight—were invalidated by the Ninth Circuit in *Envtl. Def. Ctr.*, 344 F.3d at 856 (“*EDC*”). In the Ninth Circuit, EPA has the duty to define MEP and other permit conditions—anything else would be “self-regulation,” which was explicitly prohibited by the Court in *EDC. Id.*

The Army also observes that EPA initiated, but has yet to complete, revisions to the MS4 rulemaking, as if this obligates EPA to disregard Clean Water Act obligations to reduce stormwater pollutants to the MEP in the meantime. That is simply not the law. Here, EPA specifically found that specific post-construction performance standards are a necessary part of the permit in order to achieve water quality standards, particularly in basins already failing to do so. *See*, ER 56 at 14, 17, 19; ER 66 at 37; ER 69 at 38. EPA has satisfied the obligation, relying on existing and well-founded research and case law, finding prescriptive post-construction requirements in JBLM’s stormwater permit to be necessary to meet the MEP standard.

While the permit includes standards that are both practicable and necessary to protect water quality, the Army has primary responsibility for, and flexibility in, designing a plan to implement them. Specifically, the permit clearly articulates that the Army is responsible for

developing, implementing and enforcing its own Stormwater Management Program (“SWMP”).¹⁸ After the SWMP is in place, the permit also allows the Army to request changes to delete or replace a SWMP action or activity identified in this permit with an alternate action or activity.¹⁹ Thus, the Army has primary responsibility for charting its own course, and ample flexibility in regards to how it follows that course. Further, Appendix C of the permit outlines activities that are exempt from the New Development and Redevelopment Requirements of Part II.B.5, even if such practices meet the definition of new development or redevelopment site disturbance thresholds.²⁰ This provision carves out liberal exemptions from the Hydrologic Performance Standard based on technical infeasibility and from the Hydrologic Performance Requirement for Flow Control where there are severe project costs.

Most of the provisions of the permit to which the Army objects are performance metrics—particular limits on post construction discharges for development projects. But the Army has extensive discretion on how to meet those metrics in any given development scenario as well. In fact, the Ecology stormwater manuals referenced in the permit provide a comprehensive suite of different tools and techniques to do just that. The Washington Manual makes clear that each individual facility is ultimately responsible for selecting which best management practices (“BMPs”) it will implement to control the adverse impacts of development.²¹ The Washington Manual also outlines a BMP selection process wherein a regulated facility may simply follow a step-by-step plan for choosing source control and flow

¹⁸ Permit No. WAS-026638 (2013) Section II.A.1 (page 5).

¹⁹ Permit No. WAS-026638 (2013) Section II.E.2 (page 27).

²⁰ Permit No. WAS-026638 Appendix C (page 66). *See also* SWMMWW Volume 1 at Section 2.2. ER 64.

²¹ 2012 SWMMPP, Volume I, Chapter 1, Section 1.5 Development of Best Management Practices for Stormwater Management. ER 64.

control BMPs tailored to their site and aimed at meeting the performance standards.²² The Army is actually in a far better position than most Washington permittees, which are local governments that are required to regulate private development. In contrast, the Army only has to regulate its own development practices.

III. THE PERMIT'S MODEST RETROFIT REQUIREMENT IS REASONABLE AND LAWFUL.

Most of the permit's provisions involved in this appeal address requirements for new development. Permit at 16. These permit provisions, however, do little to address the existing baseline of development that have already contributed to stormwater runoff and degraded water quality conditions, and continue to do so. To address existing development that is currently polluting streams and rivers, the permit includes a provision requiring some efforts to retrofit existing developed areas to reduce stormwater pollution. *Id.* at 24. The retrofit requirement is extraordinarily modest: JBLM has three years to develop a "plan" to reduce pollutant loadings into § 303(d) listed stream reaches, and must implement the plan so that five acres of existing impervious areas are effectively disconnected from the MS4 before the end of the permit term (i.e., in five years).²³ It must also implement a program of disconnecting rooftop downspouts in areas where it can be "accomplished" and "as soon as practicable," both terms that appear to be left to JBLM to define for itself. There is abundant evidence in the record that such retrofits are a critical component to protecting water quality, and that such retrofits are "practicable" in the sense that they are both reasonable and cost-effective. *See, e.g.*, ER 18 at 10; ER 21; ER 22 at 53-54; and ER 38 ch. 6.

²² 2012 Washington Manual, Volume I, Chapter 4, BMP and Facility Selection Process for Permanent Stormwater Control Plans (Sections 4.1-4.4). ER 64.

²³ JBLM is roughly 90,000 acres in size. The permit requires retrofits totaling 5 acres: or about a half of one hundredth of one percent (.005) of the facility.

The modesty of these requirements notwithstanding, the Army asserts that there is no legal authority to impose them at all, relying on the thoroughly discredited view that the Army can decide for itself what constitutes MEP. Petition at 32. Again, the Army's argument is foreclosed by the decision in *EDC*. Further, although the Army complains vaguely that "it is not clear" that the retrofit plan is practicable, the retrofit requirement is supported by an extensive record. Indeed, retrofit measures are specifically called out in numerous record documents for the affected watersheds that are currently not meeting water quality standards due in part to stormwater runoff from JBLM. ER 22 at 52-54; ER 82 at 4; ER 83 at 7 (NMFS recommends more frequent monitoring in permit and affirmative implementation of basin-wide retrofit plan which includes reasonable action items such as downspout disconnection and more aggressive implementation of LID retrofits to capture roof and pavement runoff); ER 86 at 37-39 (Puget Sound Action Plan). The Western Washington general permits applicable in Pierce County and Tacoma, adjacent to or surrounding JBLM, has required a retrofit program since at least 1995.²⁴ Such programs have been implemented in many Western Washington jurisdictions for decades. The record supports that the modest retrofit measures in the permit are practicable and the Army has failed to meet its burden of proof of establishing that EPA made any clear error.

Nor can the Army complain that the retrofit provisions are overly prescriptive. As a threshold matter, they are barely prescriptive at all, simply calling for a plan and an end-of-permit-term goal of an exceedingly modest portion of impervious area to be retrofitted. In any event, a permit provision that left it entirely to JBLM's discretion to implement retrofits, without a standard or oversight from EPA, would violate the law. *EDC*, 344 F.3d at 854. In *PSA I*, the

²⁴ A list of current retrofit projects being implemented by Pierce County is available here: <http://www.co.pierce.wa.us/index.aspx?nid=1828>. Tacoma's structural retrofit program is described here: <http://cms.cityoftacoma.org/surfacewater/NPDES0313/A.pdf>.

Board rejected such a provision in the Western Washington Phase I general MS4 permit for precisely this reason. *PSA I* at *29-30. It remanded the retrofit portions of the permit to Ecology to require additional prioritization of projects and oversight by the permitting authority of retrofit plans. *Id.*

In fact, the law arguably requires more than EPA has required here, not less. JBLM currently discharges stormwater to water bodies that are not meeting applicable water quality standards for pollutants that are found in stormwater. As noted above, the Clean Water Act and EPA rules require EPA (or, at a minimum, give EPA the discretion) to include requirements and limitations in NPDES stormwater permits as necessary to ensure that pollutants in stormwater are not causing or contributing to violations of water quality standards. 40 C.F.R. § 122.34(e)(1) (“You must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved [TMDL] or equivalent analysis.”). If JBLM is currently discharging pollutants from its existing developed areas that are contributing to a violation of water quality standards, minimal requirements in the permit for JBLM to plan for ways to make tiny reductions in impervious surface are the least that EPA is obligated to do. The Army presents no colorable argument against the retrofit requirements or in support of its apparent belief that it can cause and contribute to violations of water quality standards in perpetuity without taking measures to reduce them.

IV. EPA HAS AUTHORITY TO REGULATE FLOW UNDER THE STORMWATER REQUIREMENTS OF THE CLEAN WATER ACT.

Amici agree with and adopt by reference EPA’s arguments in Section IV.A. of its brief demonstrating that EPA has authority to regulate stormwater flow as a mechanism to control stormwater pollutants under 33 U.S.C. § 1342(p)(3)(B)(iii). As discussed above, the most

effective way to reduce pollutants in stormwater to the maximum extent practicable is to limit or prohibit stormwater discharges altogether. These effective techniques for managing the stormwater problem are encompassed within EPA's broad authority to impose "other provisions" that are determined appropriate for the control of pollutants to the MEP. Most pointedly, the CWA states that the goals of the law are to eliminate all discharges of pollutants to water by 1985. 33 U.S.C. § 1251(a)(1). The permit is a National Pollutant Discharge Elimination System permit. The control of pollutants in stormwater is best achieved by controlling and potentially eliminating the flow and discharge of stormwater runoff into rivers, streams, and Puget Sound entirely. *See, e.g.*, ER 1 and 4 (academic papers regarding impacts of flow on sediment and need to retain forest cover to protect against harmful flows); ER 13 at 38-48; and ER 22 at 52. There is ample evidence that controlling runoff flow is the key to reducing pollutants in stormwater. The question of whether the CWA authorizes reduction of pollutant-free flows is not relevant here or elsewhere, as stormwater always includes pollutants.

CONCLUSION

For the foregoing reasons, the petition should be denied in its entirety.

Respectfully submitted this 7th day of March, 2014.

s/ Jan Hasselman

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STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I, JAN HASSELMAN, hereby certify, in accordance with 40 C.F.R. § 124.19(d)(1)(iv), that this Brief of Amicus Conservation Groups in Opposition to Petition for Review, including all relevant portions, contains 6,214 words.

Respectfully submitted this 7th day of March, 2014.

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CERTIFICATE OF SERVICE

I am a citizen of the United States and a resident of the State of Washington. I am over 18 years of age and not a party to this action. My business address is 705 Second Avenue, Suite 203, Seattle, Washington 98104.

I HEREBY CERTIFY that on March 7, 2014March 7, 2014, I served the following documents on the following parties:

- 1. Brief of Amicus Conservation Groups in Opposition to Petition for Review and Attachments 1-4.

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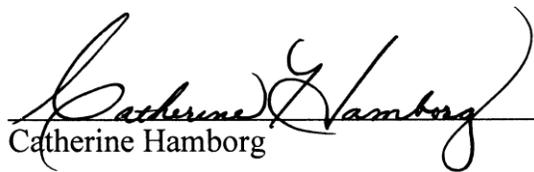
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I, Catherine Hamborg, declare under penalty of perjury that the foregoing is true and correct. Executed this 7th day of March, 2014, at Seattle, Washington.


Catherine Hamborg

LIST OF ATTACHMENTS

- ATTACHMENT 1: Scholz NL, Myers MS, McCarthy SG, Labenia JS, McIntyre JK, et al. (2011) Recurrent Die-Offs of Adult Coho Salmon Returning to Spawn in Puget Sound Lowland Urban Streams. PLoS ONE 6(12): e28013. doi:10.1371/journal.pone.0028013.
- ATTACHMENT 2: Feist BE, Buhle ER, Arnold P, Davis JW, Scholz NL (2011) Landscape Ecotoxicology of Coho Salmon Spawner Mortality in Urban Streams. PLoS ONE 6(8): e23424. doi:10.1371/journal.pone.0023424.
- ATTACHMENT 3: Center for Watershed Protection, *Impacts of Impervious Cover on Aquatic Systems 1* (2003), available at http://clear.uconn.edu/projects/TMDL/library/papers/Schueler_2003.pdf.
- ATTACHMENT 4: U.S. Environmental Protection Agency (USEPA), “Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices,” USEPA, Nonpoint Source Control Branch, Washington, DC (2007).