April 12, 2024

Stacey M. Jensen
Acting Director for Policy and Legislation
Office of the Assistant Secretary of the Army (Civil Works)
108 Army Pentagon
Room 3E474
Washington, DC 20310–0108

Re: Docket ID: COE–2023–0005, Procedures to Implement the Principles, Requirements, and Guidelines for Federal Investments in Water Resources

Dear Acting Director Jensen:

On behalf of the American Society of Landscape Architects (ASLA) and our nearly 16,000 members, I appreciate the opportunity to comment on the U.S. Army Corps of Engineers' (USACE) proposed Agency Specific Procedures (ASPs) to Implement the Principles, Requirements, and Guidelines for water resources investments.

Founded in 1899, ASLA is the professional association for landscape architects in the United States, representing about 16,000 members. ASLA members practice nationwide, with landscape architects representing all 50 states and the District of Columbia among ASLA's 49 chapters. Landscape architecture encompasses the analysis, planning, design, management, and stewardship of the natural and built environment through science and design. The profession is broad in scale and scope, with many practitioners focusing on planning and designing water and stormwater management infrastructure projects. ASLA appreciates USACE's work in developing ASPs to help enhance water infrastructure that promotes environmental justice, biodiversity, public safety, community engagement, nature-based solutions, and more.

While this proposed rule highlights support for many of ASLA priorities, we also recommend the following to improve USACE planning techniques:

Section 234.6(c)(1)—Environmental justice

Landscape Architects should be required in all USACE community engagement activities to help address projects that impact underserved communities.

ASLA supports USACE's efforts to enhance community engagement—an essential part in ensuring environmental justice—through all phases of the planning and decision-making process when evaluating water resources investments.

Historically, economically disadvantaged communities and disenfranchised groups have been disproportionately exposed to environmental hazards and harmful environmental conditions. These communities historically were not afforded equitable participation in the decision-making process, and today, these communities have disproportionately less access to environmental benefits, such as parks, green amenities, recreational opportunities, transportation services, health care facilities and healthy food options.[1]

As leaders in community engagement processes, landscape architects help build support

[1] "ENVIRONMENTAL JUSTICE." *Public Policies*, American Society of Landscape Architects, 2022, https://www.asla.org/uploadedFiles/Environmental%20Justice%20FINAL.pdf.

for projects that lead to designs that meet the needs of diverse groups of residents and stakeholders. Conventional "check-the-box" models of engagement often fail to reach and build trust with individuals in the community, especially those who are underserved and often overlooked in design or policy considerations.[2] Landscape architects have a proven track record for successful community and stakeholder engagement that provides fair and meaningful public participation opportunities for all communities. They facilitate planning and design decision-making processes that not only acknowledge past inequitable and harmful policies and practices but also provide a road map to equitable decisions.

Additionally, including more design professionals from diverse backgrounds is critical to ensure USACE continues to effectively address environmental justice in its planning process. Section 8116, Workforce Planning of WRDA 2022[3] allows USACE to enter into partnerships with colleges and universities, including historically Black colleges and universities (HBCUs), to help with career recruitment efforts. ASLA strongly encourages USACE to partner with the 102 landscape architecture programs at 76 universities and colleges across the country, including the HBCUs North Carolina Agricultural and Technical State University and Morgan State University, to help develop, recruit, and hire a diverse pool of landscape architects to work with the agency.

Including landscape architects, especially those from diverse backgrounds, in USACE project planning and design phases will lead to more equitable and environmentally just land-use decisions and outcomes.

Section 234.6(c)(3)—Healthy and resilient ecosystems

Increased landscape architecture techniques, including nature-based solutions, should be required in USACE's ASPs to help protect and restore ecosystem functions.

Biodiversity loss is a significant global crisis, on par with the severity of the climate crisis. Nearly one million of the planet's estimated eight million species are under threat of extinction, stressing the need for landscape plans that are sensitive to the needs of biodiversity.[4] Given the severity of the crisis, ASLA recommends that USACE must—not should—consider design alternatives that would better protect or help restore natural ecosystems.

Major causes of biodiversity loss are fragmentation of habitat, pollution, overharvesting of resources, climate change, and invasive species, all of which may be addressed using landscape architecture techniques. Landscape architects play a critical role in designing, preserving, protecting, and restoring land, green spaces, wetlands, coastal zones, and marine habitats—all of which support biodiversity. Using their ecological knowledge, technical skill, analytical reason, aesthetic judgment, and more, landscape architects successfully design to prioritize and promote biodiversity.[5]

Research and case studies show that certain landscape architecture strategies are most effective at increasing biodiversity. Specifically, the profession utilizes nature-based solutions to transform traditional gray infrastructure, incorporating native plants,

[2] Siler, Emily, Major Professor, and Jessica Canfield. 2023. "Engaging Communities: A Primer for Landscape Architecture Practice." https://krex.k-state.edu/bitstream/handle/2097/43308/EmilySiler2023.pdf?sequence=1.

[3] Public Law 117-263, Section 8116 (Dec. 23, 2022). https://www.congress.gov/117/plaws/publ263/PLAW-117publ263.pdf.

[4] Park, S., Ali, Z. & Zhang, P., Landscape Architecture Solutions to Biodiversity Loss: Research Study. American Society of Landscape Architects Fund. March 2024. https://www.asla.org/uploadedFiles/CMS/Practice/Action_Research/Biodiversity_Study.pdf.

[5] "BIODIVERSITY." *Public Policies*, American Society of Landscape Architects, 2023, www.asla.org/uploadedFiles/CMS/Government_Affairs/Public_Policies/Biodiversity.pdf.

supporting pollinators, enabling integrated pest management, and restoring and protecting natural areas—all of which help to develop and maintain healthy and resilient ecosystems.[6] ASLA encourages USACE projects to incorporate these and other landscape architecture alternatives to successfully address biodiversity issues.

In the past, USACE has utilized cutting-edge landscape architecture techniques, including reef-building bivalves such as oysters and mussels for coastal restoration, shoreline protection, and erosion control to manage ocean and coastal ecosystems. Notably, USACE used these techniques in the Chesapeake Bay's Native Oyster Restoration Master Plan.[7]

ASLA also urges USACE to incorporate The Sustainable SITES Initiative® (SITES®) into its ASPs to evaluate ecosystem resilience. SITES® is a nationally recognized set of comprehensive, voluntary guidelines together with a rating system that assesses the sustainable design, construction, and maintenance of landscapes and other outdoor spaces. It is used by landscape architects, designers, engineers, architects, developers, policymakers, and others to guide land design and development. Currently, there are more than 315 registered and certified SITES® projects—spanning 31 U.S. states and the District of Columbia—focusing on enhancing biodiversity.

Landscape architects led SITES® projects at HP Inc.'s campuses in Boise, Idaho, and Corvallis, Oregon. The projects transformed 200 and 179 acres, respectively, of "traditional" landscape dominated by Kentucky Blue Grass turf that required excessive water and maintenance. These revitalizations increased biodiversity by incorporating native plants that reduced water consumption and increased soil health.[8]

ASLA urges USACE to consider landscape architecture design alternatives coupled with SITES to create and maintain healthy ecosystems.

Section 234.6(c)(4) Public safety

To ensure the public's safety, USACE must include qualified design professionals, including landscape architects, in the planning, design, and construction of its public water resource projects.

ASLA supports USACE's call for design alternatives to avoid, reduce, and mitigate significant risks to public safety. ASLA agrees with USACE that public safety threats resulting from environmentally related events, flooding, and other natural disasters must be addressed. However, alternatives should also consider *any* risk of harm or injury to persons and property and utilize qualified design professionals to achieve these safety goals.

The profession of landscape architecture shares with the other design professions of architecture and engineering a significant impact on public health, safety, and welfare. Landscape architects are licensed in all 50 states and the District of Columbia to ensure the public's health, safety, and welfare. In addition to meeting STEM education and

[6] Park, S., Ali, Z. & Zhang, P., Landscape Architecture Solutions to Biodiversity Loss: Executive Summary. American Society of Landscape Architects Fund. March 2024. https://www.asla.org/evidence.

[7] Williams, Ashley. "Going Green: Army Corps Unveils New Master Plan for Oyster Recovery." U.S. Army Corps of Engineers Headquarters, April 22, 2013. https://www.usace.army.mil/Media/News-Archive/Story-Article-View/Article/478071/going-green-army-corps-unveils-new-master-plan-for-oyster-recovery/.

[8] SITES | Developing Sustainable Landscapes," n.d. https://www.sustainablesites.org/hp-inc-boise-idaho-campus-number; SITES | Developing Sustainable Landscapes," n.d. https://www.sustainablesites.org/hp-inc-corvallis-oregon-campus.

experience requirements, candidates for landscape architecture licensure pass a national registration exam—the Landscape Architecture Registration Exam—before they can be licensed by the state boards of registration. This rigorous four-part exam includes a section on Grading, Drainage, and Stormwater Management, requiring candidates to demonstrate mastery of grading and earthwork design considerations for small-to-large scale sites and detailed site-specific circulation, including addressing design alternatives, adherence to national codes, and more.

Landscape architects often play a lead role in large public and private projects, keeping the public safe from hazards, protecting and maximizing natural resources, and preventing damage to property from changes in the built environment. They make critical recommendations and decisions affecting the ability of these projects to meet public health and safety standards.[9]

Landscape architects are leaders in providing stormwater solutions that effectively minimize runoff, improve water quality, control erosion, and eliminate safety hazards. The profession routinely generates, and checks plans that stabilize disturbed ground, avoid wasteful applications of water in the landscape, preserve land values, provide accessibility as required by the Americans with Disabilities Act, manage stormwater, and create safe public and private spaces.[10]

Given their unique expertise and qualifications, USACE should require qualified landscape architects on all water infrastructure projects to ensure the public's health, safety, and welfare.

Section 234.7(f) and (g) Climate change and Water availability, water use, and resilience

USACE should continue to require consideration of climate change in all aspects of the project planning process and utilize data-driven and science-based research to inform planning decisions.

ASLA applauds USACE for requiring consideration of climate change, water availability, water use, and drought and flood resilience in all aspects of the planning process. Climate change is a critical issue that impacts both human society and the natural environment. Climate change is particularly linked to water supply and quality, including drought, flooding, sea level rise, and more.

ASLA recognizes the serious risks that climate change poses to ecosystems and public health, safety, and welfare and believes that landscape architects are the most qualified professionals to lead and develop innovative and sustainable solutions. Landscape architecture design and planning can reduce and mitigate ecological harms, improve resilience, and adapt our communities to the effects of climate change.[11]

ASLA supports data-driven and science-based research to produce knowledge that may be used to address climate change. Nature-based solutions are diverse and create a wide

[9] "PROFESSIONAL LICENSURE." *Public Policies*, American Society of Landscape Architects, 2023, https://www.asla.org/uploadedFiles/CMS/Government_Affairs/Public_Policies/Professional_Licensure.pdf.

[10] PROFESSIONAL LICENSURE." *Public Policies*, American Society of Landscape Architects, 2023, https://www.asla.org/uploadedFiles/CMS/Government_Affairs/Public_Policies/Professional_Licensure.pdf.

[11] "CLIMATE CHANGE AND RESILIENCE." *Public Policies*, American Society of Landscape Architects, 2023, https://www.asla.org/uploadedFiles/CMS/Government_Affairs/Public_Policies/climatechange.pdf.

range of outcomes. While evidence on effectiveness may be uneven across nature-based solutions,[12] ASLA submits that there is wide-ranging actionable science to support the effectiveness of nature-based solutions in addressing water management issues. Water infrastructure projects that incorporate vegetation or organic material such as seagrasses, mangrove forests, and floating ecosystems can help to mitigate climate impacts and poor air quality through carbon storage and sequestration. Additionally, these projects can create or restore habitats and ecosystems that conserve and increase biodiversity while also improving community aesthetics.

Every day, research organizations, universities, businesses, and federal, state, and local governments are all conducting scientific research on the effectiveness and benefits of nature-based solutions. ASLA urges USACE to continue to learn from and apply the latest available science when appropriate and not settle for only actionable science to prevent the inconvenience of "adopting, removing, or modifying agency procedures."[13]

Conclusion

Once again, thank you for the opportunity to comment on the U.S. Army Corps of Engineers' proposed Agency Specific Procedures to Implement the Principles, Requirements, and Guidelines for water resources investments. ASLA appreciates your consideration of its recommendations and looks forward to working with USACE to help enhance its water resources projects. If you have any questions or would like to follow up on this legislative matter, please contact me or ASLA Manager of Federal Government Affairs, Caleb Raspler, at craspler@asla.org or (202) 216-2372.

Sincerely,

Torey Carter-Conneen
Chief Executive Officer
American Society of Landscape Architects

[12] White House. Olander, Lydia, Krystal Laymon, and Heather Tallis. "Opportunities for Accelerating Nature-Based Solutions: A Roadmap for Climate Progress, Thriving Nature, Equity, and Prosperity," November 2022. https://www.whitehouse.gov/wp-content/uploads/2022/11/Nature-Based-Solutions-Roadmap.pdf.

[13] "Department of Defense, "Corps of Engineers Agency Specific Procedures to Implement the Principles, Requirements, and Guidelines for Federal Investments in Water Resources," Federal Register Vol. 89, No. 32 (February 15, 2024): Page 12089, https://www.govinfo.gov/content/pkg/FR-2024-02-15/pdf/2024-02448.pdf.