



# A PROCUREMENT GUIDE TO NATURE-BASED SOLUTIONS

---



*Valerie A. Leung,  
Nathan Woiwode,  
and Mark P. Smith*

*January 2018*

# A PROCUREMENT GUIDE TO NATURE-BASED SOLUTIONS

---

As Steve Jobs once said, “A lot of times people don’t know what they want until you show it to them”. Taken in a different light, the best way for a community to find a solution to a flooding problem is to empower experts in the field to use their full breadth of knowledge to reveal a wide array of possible solutions. Unfortunately, traditional requests for proposals (RFPs) – the primary tool that communities have for soliciting expert input – are inherently narrow in their language and implementation, potentially limiting the kinds of responses that communities may receive without providing the community an opportunity to consider all of the options available to them.

The purpose of this guide is to help communities utilize the right RFP language that will allow experts to respond with their best recommendations for managing flood and stormwater hazards. Changing the way in which we request services (such as designs, studies or plans) may increase the quality and variety of the resulting proposals in favor of those that use nature-based or other innovative solutions that increase resiliency and provide additional public benefits. Although this document offers a focus on projects related to managing river and coastal flooding and stormwater hazards, many of the approaches and suggestions are appropriate for other types of projects as well.

Nature-based solutions are approaches which use environmental processes and natural systems to help address a human or community need. Nature-based solutions can look very different from community to community depending on the type, location, and scope of the hazard addressed. Examples range from preservation and restoration of existing natural habitats, to engineering that combines services provided by nature with traditional, grey infrastructure.

Nature-based solutions are considered highly advantageous because of their inherent capacity to provide important social, economic, and environmental benefits; such as clean water, healthy environments, and green spaces for recreation; in addition to their primary function for flood management. They are key assets of a resilient community. Therefore, many communities are looking to change the way they invest in flood and stormwater management in favor of more holistic approaches, including nature-based solutions, that help protect a community’s quality of life, save lives, produce environmental benefits, and reduce costs to taxpayers.

In general, flood management projects can be broken down into three phases: (1) problem identification, (2) feasibility and alternatives analysis, and (3) project design and implementation. Once a community has identified a water management problem, establishing and implementing an appropriate solution will often require multiple RFPs. Altering the way in which a service is requested, both at the feasibility and design phase, can increase the likelihood that an effective nature-based solution will be identified and implemented successfully. There are simple steps to keep RFP language broad enough to solicit innovative proposals that are responsive to your request, while ensuring a community’s needs are met.

First, communities should establish an effective problem statement that summarizes the desired outcome of the project, including an overall community vision, without using prescriptive language that may constrain innovative solutions. A community should next develop specific, thorough selection criteria that accurately reflect the aspects of the proposal that are most important

to the project team and community. Finally, a community should develop concise deliverables for a project, even if the overall management strategy is designed to be flexible.

This guidance is organized into two parts to (1) help communities consider the advantages of nature-based solutions and (2) develop RFP language that encourages proposals with strategic, innovative approaches to conceptualize, design, and implement water infrastructure projects. The first part provides information on the benefits and applicability of nature-based solutions. The second part of this guidance is arranged similarly to that of a standard RFP, and includes insights and example language to help your team create an RFP in favor of nature-based solutions or other water management approaches that offer multiple benefits and address a range of issues.

## **PART ONE – An Introduction to Nature-Based Solutions**

- I. Why Communities Should Consider Nature-Based Solutions**
- II. Planning for Nature-Based Solutions**
  - i. Alternative Solutions**
  - ii. Public Participation**

## **PART TWO – Request for Proposal**

- I. Background**
- II. Project Goals/Summary**
- III. Proposal Format and Content**
- IV. Selection Criteria/Evaluation and Team**
- V. Selection Process**
- VI. Extras**
- VII. Scope of Work**

---

## **INTRODUCTION TO NATURE-BASED SOLUTIONS**

Nature-based approaches to flood and stormwater management vary widely in cost and site applicability. Tidal wetlands and mangroves can absorb coastal storm waters, setback levees allow rivers to use more of their natural floodplain to reduce flood stages, and bioswales and rain gardens can absorb rainwater back into the ground. While each of these approaches uses nature in different ways, they are all designed to reduce the impacts of flood and storm events, and can be as effective as more traditional built infrastructure approaches or can be used in combination with more traditional approaches for a hybridized solution.

Like traditional stormwater and flood control infrastructure, costs for nature-based solutions can vary considerably depending on the solution employed and the flooding hazard being addressed.

However, unlike traditional control measures, nature-based solutions can provide additional benefits beyond flood control, such as recreational opportunities or improved water quality.

Community context is very important in determining what is feasible and what would be most effective in addressing locally specific problems. There are nature-based solutions that can be applied in nearly any situation, though there are some approaches that work along coasts, along rivers, or to address stormwater. Understanding the regional context and the nature of the flooding issues can go a long way to helping identify which kinds of solutions may work for you.

There are many resources available to help determine what and how nature-based solutions can address your community's flood and stormwater hazards. Below are a few recommendations of guides and tools to help your project team start planning.

1. **Naturally Resilient Communities Siting Guide**: an interactive, online siting guide that allows users to learn about the benefits of nature-based solutions and explore best practices by hazard-type, community-type, scale, and cost. The guide also offers valuable information on potential funding sources that can help get a project off the ground. The guide was created by the Naturally Resilient Communities Project; a partnership that includes the National Association of Communities, American Planning Association, American Society of Civil Engineers, Association of State Floodplain Managers, Sasaki Associates, and The Nature Conservancy. ([www.nrcsolutions.org](http://www.nrcsolutions.org))
2. **Green Infrastructure Effectiveness Database**: a collection of literature resources compiled by NOAA documenting the effectiveness of using green infrastructure to reduce impacts from coastal hazards. (<https://coast.noaa.gov/digitalcoast/training/gi-database.html>)
3. **Green Infrastructure and Forestry Toolkit (GIFT)**: a website developed to assist communities in planning, implementing, and managing their green infrastructure projects with a focus on urban forestry. The toolkit was created by the National Association of Regional Councils (NARC) in partnership with Virginia Tech's Center for Leadership in Global Sustainability (CLiGS), with support from the US Forest Service's National Urban and Community Forestry Advisory Council (NUCFAC). (<http://gifttoolkit.org/>)
4. **Roadmap to Green Infrastructure in the Federal Agencies**: an online tool that assists regional councils to better understand how federal agencies define, implement, and fund green infrastructure. (<http://narc.org/environment/green-infrastructure-and-landcare/>)
5. **International Stormwater BMP Database**: a website that features publications on 600+ BMP studies, performance analysis results, tools for use in BMP performance studies, and monitoring guidance. The database is organized so information can be searched depending on the intended user which can range from public officials seeking quick/fast answers on BMP performance to individuals or groups new to BMP monitoring. The database began in 1996 under a cooperative agreement between the American Society of Civil Engineers (ASCE) and the U.S. Environmental Protection Agency (USEPA), and transitioned in 2004 to a more broadly supported coalition of partners led by the Water Environment Research Foundation (WERF), including the Federal Highway Administration

(FHWA), American Public Works Association (APWA), and the Environmental and Water Resources Institute (EWRI) of ASCE. (<http://www.bmpdatabase.org/index.htm>)

## WHY COMMUNITIES SHOULD CONSIDER NATURE-BASED SOLUTIONS

Communities of all types are encountering the need to address a growing suite of challenges with a limited pool of resources. Identifying opportunities where one project may yield a wider array of benefits or provide the ability to address multiple concerns is one good strategy for maximizing a community's return on investment of public dollars. In addition to stormwater and flood management, nature-based solutions have the capacity to provide other important social, economic, and environmental benefits; such as the creation of recreational space and improved air and water quality. There is also evidence that increasing the proximity to nature improves overall human health and well-being, and creates opportunities for increased economic activity and development. When these additional benefits are accounted for, the overall value of an investment in nature-based approaches has the potential to outweigh an investment in single-solution infrastructure.

## PLANNING FOR NATURE-BASED SOLUTIONS

Successfully implementing nature-based solutions takes more than a well-written RFP. Properly framing the problem to allow for a wider array of potential solutions is vital, as is engaging the public to build support and understanding of what the project development process may yield. Below are a few tools and information to help your project team compare infrastructure investment opportunities for your community, as well as funding options available to projects that incorporate nature-based solutions.

1. **EPA Clean Water State Revolving Fund: Financing Alternatives Comparison Tool**: a financial analysis tool that helps municipalities, utilities, and environmental organizations identify the most cost-effective method to fund a wastewater or drinking water management project. The tool allows you to compare financing options for your water infrastructure project, and accounts for the time value of money by allowing you to convert future cash flows into today's dollars by using a discounted rate which allows for a more precise comparison of costs. (<https://www.epa.gov/cwsrf/financing-alternatives-comparison-tool>) Additionally, the EPA Green Infrastructure website lists funding sources and tools. (<https://www.epa.gov/green-infrastructure/green-infrastructure-funding-opportunities>) and (<https://nepis.epa.gov/Exec/QueryPDF.cgi?Dockey=P100LPA6.txt>)
2. **Green Values National Stormwater Management Calculator**: an online tool that allows users to compare performance, costs, and benefits of nature-based solutions to conventional stormwater practices. The tool was developed by the Center for Neighborhood Technology (CNT) based in Chicago, IL. (<http://greenvalues.cnt.org/>)

3. **Naturally Resilient Communities Siting Tool**: an interactive, online guide created by the Naturally Resilient Communities Partnership also offers information on funding nature-based projects. (<http://nrcsolutions.org/funding/>)

### ALTERNATIVE SOLUTIONS

During the planning and analysis phase of your project, consider requesting a comparison of alternative management solutions; including a feasibility, benefit, and cost analysis. A feasibility study and cost-benefit analysis of alternative solutions, including an analysis of non-action, will help your team explore potential management approaches before committing to a project, and help guide reasoning for supporting one solution over another. Remember, you must explicitly ask for a consideration of alternatives within an RFP. Respondents cannot suggest alternative solutions unless you give them the flexibility to do so. Additionally, consider requesting an analysis of *combined* alternative solutions, both nature-based and traditional, to determine if additional benefits are realized when several actions are taken together. This supplemental inquiry may help alleviate stakeholder concerns and establish a strong business case that may help prevent future project delays.

### PUBLIC PARTICIPATION

As your project team builds a business case for investing in nature-based solutions, it is crucial to engage the public and reach out to your stakeholders before getting too far along in the decision-making process. Many groups that have gone through the process of implementing nature-based solutions emphasize how important it is to start education and outreach as early as possible, in addition to staying transparent. It is also beneficial to examine your project or problem in a regional context. Identify activities that meet goals of multiple sectors, such as water and energy, or forests and biodiversity. Establish and engage diverse alliances to accelerate effective problem-solving, explicitly including disadvantaged communities which are disproportionately vulnerable to climate impacts. Are there other management projects in your watershed that can be leveraged? Are there partners that may be interested in supporting nature-based solutions over traditional infrastructure? Start asking these questions early and building partnerships and support for your project.

---

## REQUESTING PROJECT PROPOSALS

This portion of the guide walks through the typical sections of an RFP and offers suggested language that encourage bidders to recommend a range of options and consider nature-based approaches when developing their responses. The following suggestions focus on procuring feasibility, planning, and design services related to nature-based solutions. All suggestions may not be relevant to your community's needs or project, but we hope will help you think through options and consider concepts that are important to the process.

## I. BACKGROUND

The background section should cover three main topics: (1) a problem statement or desired outcome(s), and any relevant factors, (2) future conditions, and (3) your community vision.

1. Briefly describe the desired outcome of the project and include information on the subject area, stormwater or flood hazard to be addressed, and any preference for secondary benefits to the community. It is also an opportunity to discuss pertinent social, environmental, historical, and regulatory information that should be taken into consideration by your bidders. It is important at this stage to not suggest a particular approach to address the problem – but to clearly state the desired outcome or objective. Although it is important to summarize your expectations, overly-detailed terms may result in bidders who simply respond to your specifications without offering strategic solutions.
2. The background section also serves as an important space to address future conditions, future development, and how the two may interact. Planning should be based on a range of plausible future scenarios, including extreme ones, to address uncertainty in both near- and long-term time frames. Climate change and its potential impacts to the project site should be considered over a meaningful time horizon. Longer-term planning can help communities avoid mal-adaptation – taking actions that might work today but, in the long run, will inhibit or prevent future adaptation actions that arise as the climate changes. Not considering future changes today may result in costly retrofits in the future. (Philipsborn, 2017) An excellent tool for understanding and managing your community’s climate-related risks and opportunities is the U.S. Climate Resilience Toolkit. The website was created under the United States Global Change Research Program, and is managed by NOAA’s Climate Program. (<https://toolkit.climate.gov/>)
3. Include a discussion of the goals and vision of your community. Exerting an influence over the design of new developments is often essential if a community’s social, environmental, and aesthetic values are to be protected or re-imagined. (Yaro, Arendt, Dodson, & Brabee, 1989) It is important to define this vision and make it a consideration in the procurement process. Create a problem statement that emphasizes a desired outcome rather than a prescriptive design-type. Use language that allows for innovation and unique solutions that embrace the community vision. Furthermore, communities are increasingly faced with various water management challenges; including impacts to water quality, water quantity, and biodiversity; the need for green spaces and recreation areas; risks associated with climate change; and conflicting values and priorities (e.g. a reservoir should be empty for flood control, full to serve as a water supply, or remain constant for recreation). It makes ever more sense that water management methods should incorporate a holistic approach, like nature-based solutions, that can adapt to suit a variety of needs and the uncertainties that lay ahead. It is important to explicitly request holistic, integrated solutions that consider the competing needs of a community.

**Background Example 1** – *An excerpt of an RFP background with an emphasis on climate change, future conditions, and a strong preference for nature-based solutions.*

**Background Example 2** – *An excerpt of an RFP background that provides statistics and information to set the stage for requesting protection and restoration solutions that will offer multiple benefits.*

**Background Example 3** – *An excerpt of an RFP background that includes a problem statement with broad language that encourages innovation.*

## **II. PROJECT GOALS/SUMMARY**

A key part of any successful RFP is a project summary that contains a clear statement of the goals, expected deliverables, and desired outcome. Whether soliciting plans or studies, the summary should include, at a minimum, (1) the desired work product to address your water management goals, (2) preferential secondary benefits, (3) project constraints that applicants should consider (e.g. funding or maintenance restrictions), and (4) specifications that describe the physical characteristics, quality, or desired outcomes of the project.

### **Performance vs. Design Specifications:**

There are two types of specifications: performance and design. A performance specification describes the desired outcome of a commodity. Performance specifications are best used when the method and means of achieving an outcome are unknown. They also allow a community to benefit from the latest technologies, like nature-based solutions. However, specifications that are too vague can place additional risk on the applicants who are responsible for achieving the outcome and may discourage participation in the bidding process. Conversely, a design specification provides prescriptive terms and establishes the characteristics a commodity must possess. If your project team has the experience and knowledge to endorse a specific solution, you may decide to solicit proposals that meet precise design criteria. However, the more prescriptive the request, the greater the risk to the project team to produce a successful outcome. (Chartered Institute of Procurement & Supply (CIPS) & National Institute of Governmental Purchasing, Inc. (NIGP), 2016)

While your team may decide to include a numbered list of deliverables and specifications, beware of creating a list that too heavily dictates specific features of the work product. Prescriptive specifications discourage bidders from recommending innovative techniques and may commit you to a particular solution or approach. Before you begin, your team should be in agreement about what services are required, and should establish consensus on aspects of the project that are flexible and what are non-negotiable.

**Summary Example 1** – *A project summary excerpt that clearly defines the expected service, as well as the project's water management goals, funding restrictions, and performance-based specifications.*



**Summary Example 2** – *A project summary excerpt that outlines expected services and performance specifications; however, preference is noted for a specific design feature. The summary also outlines monitoring expectations and secondary benefits.*

**Summary Example 3** – *A project summary excerpt that requests stream-crossing design improvements that meet a variety of performance specifications.*

Remember, scientific and economic data make for informed decision-making. As your team develops a project summary, be sure to include internal, public, or partner studies; as well as existing plans or concepts that should be incorporated into or should inform the proposed work.

**Summary Example 4** – *An excerpt from a request for proposals that establishes existing studies and concepts that are expected to inform the proposed work.*

Furthermore, it is important to consider any and all potential project activities before requesting any work. As with traditional infrastructure projects, implementing nature-based solutions will require support from two key groups: the public and the decision-makers. Do you need to strengthen your business case or need help demonstrating the long-term value of an investment in nature-based solutions? Will your team require an analysis of alternative solutions? Does your team have the capacity to compile data, conduct public outreach and stakeholder engagement, or develop necessary funding mechanisms? Do you need to factor this into your current request for proposals or create a stand-alone request?

**Summary Example 5** – *An example of an RFP where alternative solutions and analysis are factored into the desired services.*

### **III. PROPOSAL FORMAT AND CONTENT**

Most RFPs provide a required format for responses to ensure that the various bidders provide similar information and provide it in a similar format to make it easier for the project/selection team to compare responses. Here we provide some tips about what your project team may want to consider including in the proposal format section of an RFP.

#### **i. NON-RESPONSIVE PROPOSALS**

Regardless of how your team defines the specifications of the project, it is important that your RFP includes basic language that establishes the minimum standards of a qualifying proposal and what will result in an automatic dismissal of an applicant's proposal. To encourage creative proposals that respond to a problem rather than a specific design request, it is critical to note that proposing optional elements, including alternatives that may fluctuate project costs, will not be viewed as being "non-responsive".

#### **Example - REJECTION OF NON-RESPONSIVE PROPOSALS**

**ii. CONTENT**

To ensure a fair bidding process, your team must be explicit regarding your expectations for submitted proposals. What information does your team need to make an informed selection of a winning proposal or vendor (e.g. technical descriptions, budget, timeline, resumes, etc.)? It may be beneficial to provide an outline for how the proposal should be formatted and a description of the content that applicants must include to qualify.

**Example - PROPOSAL FORMAT**

**iii. OPTIONAL ELEMENTS**

While most communities will want to make consideration of nature-based approaches a *required* element of the proposal, a good way to increase innovation is to allow or encourage the inclusion of optional elements that allow bidders to recommend additional aspects beyond the scope of work without being penalized for unsolicited features. Applicants may then choose to recommend additional strategies that may distinguish their proposal from the rest. Conversely, an applicant may also choose to minimize their initial costs during the bidding process by responding only to the scope of work without consequence.

**Example - OPTIONAL ELEMENTS**

**iv. FAVORABLE CONSIDERATIONS**

To secure the best possible proposals, it is important to note any plans or strategies that are considered favorable to your project team. Perhaps there are aspects of a regional stormwater/flood management plan that your team wishes to model, or cooperative engagements with other agencies or non-profit organizations that you are interested in exploring. Make these ambitions known to your bidders!

**Example - FAVORABLE CONSIDERATIONS**

**IV. SELECTION CRITERIA AND TEAM**

Perhaps the most important aspect of any RFP, in addition to a clear goal statement, are the selection criteria. These provide the yardstick against which a bidder's proposal will be measured.

Before developing criteria, however, it is beneficial to establish a selection team. Who will decide the winning proposal? New solutions to water management call for new administrative processes. An effective selection team should consist of members with wide-ranging expertise or, at the least, be in contact with an advisory group with members of varying expertise that can help inform and assist the team in making the best decision possible. For instance, the Department of Transportation may play a lead role on the selection team for a road project; however, if the project is a restoration project with a road *component*, it is important to recognize when an alternative party should be included in the decision-making process or take the lead. (Baumann, 2017) Include individuals, as part of the selection team or otherwise, that have the capacity to create or improve technical and scientific standards and

measures. Reach out to universities or non-profit organizations to tap into expertise that could benefit the outcome of your project. It is also worthwhile to note, as you develop your evaluation criteria, that having an inter-disciplinary *design* team that includes construction professionals and maintenance stewards is important to cost-effectively creating strategic and innovative solutions. (Rosenbluth, 2017)

The key to creating an effective evaluation system, in addition to assembling a well-rounded selection team, is establishing criteria that credit proposals which directly address your project goals and desired deliverables. To ensure a fair bidding process, the content that will be used to judge proposals cannot be vague or irrelevant to the scope of work. Evaluation criteria should be firmly rooted in your project goals and deliverables, and should clearly describe preferences that may distinguish one applicant from the rest. For instance, if your project goals are to secure some sort of nature-based design to control stormwater flooding in your downtown district that offers recreational space and increases stormwater retention; you must then rate proposals based on those factors at a minimum: (1) is it a nature-based solution, (2) is the flood management design sound, (3) does it increase rainfall storage capacity, and (4) does it offer recreational space? Moreover, successful applicants should be expected to address *how* their proposal will deliver the desired outcomes and enhance your community's goals, and not just restate the project objectives. Most project teams will assign a point system based on their established standards and their relative importance to the community; proposals that earn the most points win the bid.

A vague selection process increases the risk that your project team may be open to criticism for an unfair bidding process or supporting a favored applicant. Developing well-defined expectations and evaluation criteria help to avoid doubt later. Keep in mind, if your project team decides to solicit proposals that meet precise design specifications, it places a greater risk on your project team to produce a successful outcome. In that case, it is extremely important to develop science-based metrics that are well-represented in the selection criteria, in addition to establishing a risk management strategy.

There are standard criteria often used to evaluate proposals regardless of project type; such as timeline, budget, relevant experience, and organizational and staffing capabilities of prospective consultants. In some cases, your team may decide to provide a preferred contract template as part of the bid package and require proposers to specify any deviations to the contract as part of their proposal. Your RFP may then state that conformance to (or deviation from) the preferred contract terms will be one of the selection criteria. Whether to pursue such an approach will depend on individual circumstances and the project's overall objectives, but it can sometimes cut down on the scope and length of contract negotiations. Another valuable criterion is quality assurance (QA). Analyzing a proposal's QA plan may help your team ensure adequate stakeholder engagement which is especially useful if your team and/or partners are unfamiliar with the recommended solutions and technologies, like nature-based solutions. Additionally, QA standards enable your team to examine an applicant's adaptive management strategies. Adaptive management is a science-based approach to project management that uses a structured, repetitive process of application and, subsequent, modification that is informed by the outcomes observed in a monitored system. Adaptive management

allows a team to recognize miscalculations early in the process of implementation and correct as necessary. Monitoring requirements are not only crucial to measuring the success of a nature-based project, but also demonstrate the adaptability of these projects and sophistication of natural infrastructure. Adaptive management offers better risk management, and ensures the right practice is implemented at the right place, time, and scale.

There are online tools available to help you develop your selection criteria. The Institute of Sustainable Infrastructure's Envision rating system (<https://sustainableinfrastructure.org/>) provides a holistic framework for evaluating and rating the community, environmental, and economic benefits of all types and sizes of infrastructure projects.

### **Example - SCORING SYSTEM FOR ELIGIBLE PROPOSALS**

## **V. SELECTION PROCESS**

It is very important that your team is in agreement on all aspects of the selection process and that the RFP outlines exactly what bidders can expect from the process.

Once the selection team is confirmed, you may decide to identify them or their general expertise/job title within the RFP. More importantly, it is crucial that your RFP establishes the selection team's right to contact applicants for clarification on a proposal if necessary. This is especially valuable if your team is unfamiliar with the proposed technologies or solutions, and may want the opportunity to ask questions or allow an advisory group to ask questions. Be sure to clarify the procedure for submitting clarifying questions and answers. Furthermore, your RFP should mention any arrangements for site visits as a pre-submission requirement or otherwise.

Lastly, it is worth reiterating that new solutions to water management call for new processes. Flood and stormwater infrastructure is in dire need of a paradigm shift away from the lowest-cost preference. Low cost options may result in low-quality solutions that do not fully address your community's needs, and may not deliver the advantage of multiple benefits and the adaptability that offers the greatest lifecycle of an investment. Holistic, integrated management approaches that satisfy the diverse needs of the public should become the convention if we want to build resilient communities. It is also important to note that nature-based or other innovative solutions don't always equate to highest or higher costs. (Philipsborn, 2017) This is why it is crucial to create a procurement process that focuses on the best possible solution for your community first, before your team negotiates details to suit your unique circumstances. Consider a competitive proposal process in which the most qualified provider is selected, and price is not used as an initial selection factor. Once the most qualified provider is selected, then negotiations for fair and reasonable compensation of professional services can occur. If negotiations are not successful with the selection team's first choice, move on to the next best provider. If you decide to leave the price negotiation for a later stage, it still might make sense to have all respondents submit pricing information with their proposals (e.g., labor

rates, estimates for specific deliverables or the overall job) so that you will have some idea of reasonable pricing going into negotiations with your highest-ranking bidder. (Weisshaar, 2017)

### **Example - SELECTION COMMITTEE**

#### **i. PROCUREMENT PROCESS**

It is also recommended that your RFP include standard language regarding your community's procurement process, and assurances to protect your team and stakeholders from obligations and liability. It should be clearly stated that the RFP in no way obligates your team to enter into contract or reimburse bidders for any incurred expenses. Language in this section should equally guarantee your bidders a nondiscriminatory, competitive selection process. Lastly, don't forget to outline the proposal submission process, deadlines, and contact information.

## **VI. EXTRAS**

Extra information regarding contract terms or insurance requirements may be useful to include if, for instance, there are minimum insurance policy requirements the successful consultant will be required to maintain, or special contract terms with which the consultant will be expected to comply. If your contract will include conditions that could delay negotiations or obstruct an agreement, it is best to declare those terms early in the process. If your team has any rigid contractual requirements, include these as part of your selection criteria, as well. Regarding insurance requirements, it is important to consult your counsel and insurance provider as early in the process as possible to determine the best options for coverage; this is especially important when the proposed project types may be new territory for your community. If your project team will ask bidders to submit proof of coverage, it is better practice to require the submission of the policies themselves, rather than just a certificate (which is only a broker's representation of certain basic policy terms). However, whether you decide to require the policies or just the certificate, it is important to specify in your RFP when the proposer should submit this insurance information. The submission of the insurance information should be sufficiently in advance of the procurement decision to allow for review of the insurance policies and the modification of such policies if needed (e.g., to include an additional insured, increase policy limits, etc.). (Weisshaar, 2017) Lastly, it is important to check applicable federal, state, and local laws to ensure your purchasing process and RFP abide by procurement laws, such as laws pertaining to ethics in public contracting and minority participation. Also, consider including appendices to your RFP regarding applicable laws or mandatory documents, such as an anti-collusion statement, or reference to relevant procurement laws (e.g. statutes from the state and local government conflict of interest act).

## VII. SCOPE OF WORK

The scope of work is your team’s opportunity to build upon your project goals, and outline exactly what products your team expects to receive or outcomes to accomplish. Be sure to think of the work in terms of tangible deliverables that the awarded contractor or consultant will be expected to deliver. This section will vary dramatically depending on the hazard-type, community, and work required; however, there are a few key points worth mentioning.

1. **KNOW YOUR END GAME.** Do your project goals and obligations to the community and stakeholders match your deliverables?
2. **CONSIDER PHASING.** Does the project need to be phased? Does your project team have the capacity to carry out any additional steps that may be required, such as landowner outreach and public education?
3. **DETERMINE A USEFUL PERFORMANCE METRIC.** How will you measure project success? What metrics will help you monitor progress (e.g. volume retained, nutrient load reduction, etc.)? In terms of developing a management plan for stormwater runoff, for example, you may decide to ask bidders to explain how to maximize groundwater recharge of a whole site as opposed to requesting a plan that encompasses a generic set of best management practices (BMPs), such as bioswales and rain gardens. Consultants are able to calculate the resultant groundwater infiltration effects at a site based on the employed set of BMPs. Thus, you could use the groundwater infiltration volume for each design, or its converse, the stormwater volume that would otherwise need to be managed, as a performance measurement. The more groundwater infiltration, and the less stormwater volume requiring management, the better. Specifying a desired BMP is not necessarily going to provide what is best for a site in terms of net performance. The consultant should first analyze the maximum groundwater infiltration they can attain, then recommend solutions. Remember to be strategic and think of your project in the context of a whole system, region, or watershed. (Sasson, 2017)
4. **A WORD OF CAUTION.** Refrain from using descriptions or examples that are copyrighted or trademarked to avoid an unintended conflict of interest or perceived conflict with any one applicant.
5. **REQUEST TANGIBLE PRODUCTS.** Be specific regarding any non-negotiable deliverables. For instance, if you are requesting proposals for designs of nature-based solutions to flood management that also provide socioeconomic benefits; rather than asking for “socioeconomic data to demonstrate social benefits,” you should request the specific type of data that will demonstrate that benefit to your satisfaction (e.g. flood damage and insurance data; demographic datasets in a 0.5-mile radius of the site; the quantity, type, and duration of jobs created by the project for both construction and maintenance, etc.). (Braun, 2017)
6. **EXAMINE ALTERNATIVE SOLUTIONS.** Would a cost-benefit analysis of alternative solutions (or analysis of non-action) help your team explore and implement new water management approaches? If so, your team should consider the information it wants to extract from such an analysis. For instance, if you are concerned with climate change and

performance, request an analysis of alternative solutions under various scenarios; including extreme weather events such as a 100-year flood or a 20-year return period storm event (e.g. hurricanes or nor'easters). Your team may also consider requesting an analysis of combined alternative solutions, both nature-based and traditional, to determine if additional benefits are realized when several actions are taken together. Additionally, it may be beneficial to request a report of enabling conditions and limiting factors that could reduce the potential to implement alternatives at the site or, conversely, could potentially make a project more appealing. Such factors may include: property ownership, proximity to existing utility infrastructure, future development proposals, current land use, topography data, and square footage available. Remember, if you do not ask for options and alternatives in your RFP, your bidders cannot respond with options or alternatives in their proposal, even if they are aware of more advantageous alternatives to what was originally requested.

7. **PLAN FOR MAINTENANCE.** Like traditional infrastructure, nature-based solutions may require maintenance and monitoring to continue performing effectively. Your team may require assistance developing future monitoring and management plans. This may include annual costs, horticultural requirements, monitoring timelines, required training for government employees, and feasibility reports for utilizing volunteers or citizen science. Establishing funding for maintenance can be a difficult for nature-based projects. Some states are beginning to understand the critical role of source watersheds and have implemented policies (California Bill AB 2480) that recognize and define source watersheds (and their maintenance) as integral components of water infrastructure. However, in lieu of policies that improve funding for nature-based solutions, establishing partnerships may reduce the burden of operations and maintenance. Identify nearby landowners, such as land trusts and environmental non-profits, that may be interested in sharing management responsibilities in exchange for the benefits of nature-based solutions. Remember, your RFP should emphasize a preference for solutions that capitalize on such partnerships or, if necessary, request funding models as part of the scope of work.
8. **ESTABLISH FUNDING MECHANISMS.** Implementing nature-based solutions to flood and stormwater management may offer cost savings to a community. Not only can they directly mitigate damages from flooding events or pollutant runoff, some solutions may require little to no long-term maintenance after installation, become self-maintaining over time, and provide wider environmental and social benefits. However, like grey infrastructure, these projects still require funds to implement and some may still require funds to maintain them, even if only temporarily. Unlike traditional approaches, however, nature-based solutions attract a broad range of partners and unlock a variety of alternative funding sources in both public and private sectors. Grants or low-interest loans may be available for planning and implementing resilient solutions. Keep in mind that it is crucial to outline any relevant funding restrictions within the scope of work in your RFP. Additionally, your team may request that applicants demonstrate how the recommended solutions, including operations and maintenance, can be integrated into existing budgets and planning processes across multiple government departments (e.g., public works, parks and recreation, emergency management, education, transportation). For instance, a highway department may be able to offer mowing services to a waterfront, flood-tolerant park without significantly

impacting its budget. Furthermore, you may request that your bidders use low-cost, locally-sourced materials wherever possible. (Braun, 2017)

9. **ADAPTIVE MANAGEMENT.** The primary goal of an adaptive management plan is to put into place key management and monitoring parameters that are crucial to project success. Adaptive management actions should be designed and carried out in a way that increases your understanding of the effects of actions in a nature-based system. This reduces the uncertainty associated with future decisions, allows for modification, and improves the effectiveness of actions. (County of King, Finance and Business Operations Division, 2002) This method of decision-making and execution can also lead to cost reductions. If your team is ready to design or implement, consider requesting that each bidder submit a draft management and monitoring plan that identifies key monitoring elements to assess the success of the project as related to the goals and objectives. Your team may also want to consider factoring risk management into the scope of work and, thus, selection criteria (e.g. technical soundness of design and overall risk of project failure). You may decide to request that bidders address their approach to risk management; including identification of potential risks, proposed mitigation, and insurance protections.
10. **PROVIDE AVAILABLE DATA.** Remember to provide bidders with any useful information about the project site or requirements; such as site characteristics (e.g. vegetation type, soil type, topography), aerial photographs, site restrictions (e.g. permits, federal, state), and significant prior research.

### Conclusion:

Communities need resilient infrastructure that can adapt to future changes and provide multiple benefits that expand the value of their initial investment. Nature-based solutions are advantageous in their ability to address stormwater and flood hazards, but also in their capacity to provide secondary benefits, such as clean air and water and recreational spaces. We encourage communities to use this guidance and example RFP language to obtain proposals that offer innovative solutions that are most advantageous for people and nature.

***Note: This guidance document is not intended to serve as legal advice and should not be construed as such. Please consult your own procurement procedures, policies, local/state/federal regulations and, if necessary, counsel before engaging in any of the activities discussed herein.***



## EXAMPLE LANGUAGE

*Note: The following example language was either taken directly from real RFPs that resulted in the design or implementation of a nature-based solution to a flood management problem, or were inspired by RFPs and/or altered slightly where appropriate to demonstrate the concepts presented in this guide.*

### I. BACKGROUND

#### **Background Example 1 – An excerpt of an RFP background with an emphasis on climate change, future conditions, and a strong preference for nature-based solutions:**

*Stormwater runoff is a major source of pollution to the Anacostia and Potomac Rivers and Rock Creek, and causes flooding that negatively affects residents and businesses. The City is also ranked as one of the top five urban areas on the US East and Gulf Coasts where increased flooding is expected to impose significant risk to infrastructure due to predicted and observed climate change effects. The combination of more intense rain events and sea level rise is expected to increase the frequency and magnitude of flooding across the City and in the Anacostia River watershed.*

*The City recognizes the potential for nature-based solutions to mitigate impacts of development and climate change while also improving the quality of life in a community. Nature-based solutions can offer cost-effective ways to mitigate risk, and technologies that have the ability to adapt to changing conditions, in addition to providing other important benefits like clean water, healthy environments, and green spaces for recreation. Economies can be enhanced by guiding smart development and investments to reduce damages from natural disasters. Considering these combined benefits, the City seeks to implement disaster risk reduction solutions that improve the triple bottom line of social, economic, and environmental benefits. This RFP seeks to expand our existing stormwater and flood control asset inventory in a way that considers all solutions, rather than the narrow toolkit of single-solution gray infrastructure. General preference will be given to nature-based solutions to management challenges, especially those that reduce the cost and frequency of maintenance currently involved with installing gray infrastructure. Contractors are encouraged explore innovative project ideas that meet the goals of the project, while also respecting applicability to the solution/problem and feasibility of the project.*

[Return to Background Section](#)

#### **Background Example 2 – An excerpt of an RFP background that provides statistics and information to set the stage for requesting protection and restoration plans that will offer multiple benefits:**

*Coastal and inland wetlands cover over half a million acres of Massachusetts. From the calcareous wetlands in the Berkshires that are home to some of our few remaining bog turtle populations, to the salt marshes along Cape Cod that are a popular spot for anglers; an acre of wetland produces more economic value in ecosystem services than an acre of most upland systems. Massachusetts' policy has long given wetlands significant protections in recognition of their ability to reduce flood risk and damage, control mosquitoes, filter pollutants out of drinking water, and help reduce the impacts of coastal storms.*

*Furthermore, under the Global Warming Solutions Act (GWSA), the state has established goals of reducing greenhouse gas emissions by 25% by 2020 and 80% by 2050. Coastal wetlands play a critical role in fighting climate change. Plant habitats growing in coastal lands and near-shore marine environments have the ability to store large amounts of carbon. Such “blue carbon systems,” as well as inland wetlands also play critical roles in climate change adaptation. As climate change brings increased precipitation and more severe floods and storms, wetlands have proven an effective way to reduce risk along coasts and rivers. One acre of inland wetland can hold ~1 million gallons of water in times of flooding, and Massachusetts’ coastal wetlands provide an average of \$643 million in storm protection services each year. Blue carbon systems, if we keep them healthy, can migrate and expand over time, providing increased protection against storms and avoiding the need to constantly build seawalls and other gray infrastructure higher and stronger as sea levels rise.*

[Return to Background Section](#)

**Background Example 3 – An excerpt of an RFP background that includes a problem statement with broad language that encourages innovation (Wildlands Restoration Volunteers, 2013):**

*In September 2013, the Big Thompson River through Loveland experienced a record flood event with estimated peak flow rates over 19,000 cfs in many areas. The high peak flow combined with the extended duration of the event resulted in significant changes in the river corridor along with infrastructure damages in the tens of millions of dollars. In various locations, the river experienced significant deposition and incision, cut new overbank channels, rerouted itself through old gravel pits, lost much of its riparian ecological function, and migrated or scoured to the point of destroying numerous waterlines, septic systems, roads, embankments, highways, bridges, and other infrastructure.*

*Our community requires an updated flood water management plan that offers a range of solutions that address flooding along the main city corridors near the Big Thompson River, especially areas susceptible to the most significant infrastructure damage to city assets both directly and through erosion and accumulation of sediment, while preserving and creating green spaces along the River to increase recreation space for residents and tourists. The City seeks to not only reduce risk of flooding, but also to build resilience to future risk by implementing strategic approaches that address identified stresses and potential shocks; such as nuisance flooding risk, major storms, and the impact on residents and economic activity.*

[Return to Background Section](#)

## **II. PROJECT GOALS/SUMMARY**

**Summary Example 1 – A project summary excerpt that clearly defines the expected service, as well as the project’s water management goals, funding restrictions, and performance-based specifications (Sasaki Associates, Inc. & City of Norfolk Department of Public Works, 2016):**

*The purpose of this Request for Proposals (“RFP”) is to procure Design Services for resilient infrastructure projects for the City as a subrecipient to the Commonwealth’s HUD-National Disaster Resilience Funding; see Appendix A: Grant Subaward for more information and restrictions. Resilient infrastructure projects will create and/or augment existing practices to resist or rapidly recover from disasters or other shocks with minimal outside assistance. Resilient infrastructure projects shall generate*

*and maintain prosperous social, economic, and ecological systems; and allow for renewal and re-organization as needed. Resilient infrastructure projects may include areas for recreational use, green jobs creation, educational programming, and increased ecosystem services; such as enhanced habitats, cleaner air and water, flood risk reduction, and food production.*

*Projects shall consist of three primary water-management strategies. The first is to protect the shoreline so that high water levels in the river do not enter the neighborhood or the stormwater system. The second is to capture rainfall across the watershed to slow its flow into the stormwater system and provide additional storage for rainwater so that the water does not pond in the streets. The third is to introduce a living shoreline feature to minimize erosion and increase environmental wellness. The City proposes to use these water management activities as opportunities to improve the neighborhood by increasing neighborhood connectivity, adding new and improved natural habitat, and increasing resilience to flooding.*

[Return to Summary Section](#)

**Summary Example 2 – A project summary excerpt that outlines expected services and performance specifications; however, preference is noted for a specific design feature. The summary also outlines monitoring expectations and secondary benefits.**

*It is the intention of the Foundation to solicit Proposals for the design phase of a pilot project to protect five (5) sections of coastline along the Gulf of Mexico. The goal of this proposed project is to mitigate coastal erosion and create marsh stability by applying one or more nature-based solutions, in which oyster reefs will play a dominant role. Nature-based solutions are those which are designed to enhance and adapt to local environmental condition; therefore, their inherent adaptability means these technologies should require little to no long-term maintenance after installation, become self-maintaining over time. Proposed solutions must be managed natural and semi-natural systems (such as living shorelines), as well as contribute to the delivery of additional ecosystem services, specifically: fish production, shoreline stabilization, habitat enhancement, climate change mitigation, and storm surge protection.*

[Return to Summary Section](#)

**Summary Example 3 – A project summary excerpt that requests stream-crossing design improvements that meet a variety of performance specifications:**

*The Department is inviting implementation proposals for public infrastructure improvements at stream crossings, including culvert upgrades, to improve public safety and minimize impacts of water quality and aquatic habitat. Project proposals must address improvements, modifications, repairs, or upgrades to existing culverts or stream crossings. Eligible recipients must describe how the proposed project meets the following criteria:*

- Benefits water quality*
- Improves habitat for wildlife, fish, and other aquatic life (such as through the replacement of blocked or poorly sized culverts or stream crossings)*
- Improves public safety by reducing risk of infrastructure failure (such as culvert washouts)*
- Includes provisions for climate resiliency (such as flood protection, prevention, and control at the project site and downstream)*

[Return to Summary Section](#)

**Summary Example 4 – An excerpt from an RFP that lists existing studies and concepts that are expected to inform the proposed work.** (County of King, Finance and Business Operations Division, 2002)

*The proposed Strategic Assessment shall be informed by the following core concepts:*

***Ecosystem-Based Management***

*The Strategic Assessment should be guided by the concept of ecosystem management as discussed in the County Aquatic Conservation Strategy (ACS) document (Appendix A), which states “The ecosystem is an appropriate target level for conservation planning and for integrating concerns from other levels of organization.” Ecosystem management provides the basis for an “efficient, economical, and effective” conservation strategy.*

***Viable Salmonid Populations (VSP) Document***

*The National Marine Fisheries Service (NMFS) published a document in 2000 titled Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units (McElhany et al, 2000). This document describes four parameters of a viable salmonid population that NMFS will use to develop de-listing criteria. The Strategic Assessment must address these four parameters in order to provide the scientific framework that will lead to an acceptable conservation plan.*

[Return to Summary Section](#)

**Summary Example 5 – An excerpt of an RFP where alternative solutions and analysis are factored into the desired services:**

***Project Tasks (cont’d):***

*Task 3. Development of Restoration Alternatives: The Consultant shall work with the Project Team and critical stakeholders (e.g. regulatory agencies, neighboring landowners) to develop feasible restoration scenarios, which may include individual modifications or combinations of modifications to the existing system, to be evaluated as part of an alternatives analysis.*

*Task 4. Restoration Alternatives Analysis: Based upon the information compiled in the previous tasks, the goals of the Project, and input from the Project Team and stakeholders, the Consultant shall analyze a minimum of two (2) wetland restoration alternatives. Alternatives shall be modeled and evaluated against existing conditions to estimate potential changes to the hydrodynamics and salinity distribution and the subsequent impact on wetland vegetation. Restoration alternatives shall be analyzed under two (2) scenarios: (a) normal operational tidal conditions and (b) a 20-year return period storm event (e.g. hurricane or nor’easter).*

*Task 5. Community Engagement and Outreach Plan: The Consultant shall provide an outline of proposed activities and a corresponding timeline that ensures public education and involvement; including variable approaches and considerations for the alternatives analyzed in Task 4 above.*

[Return to Summary Section](#)

**III. PROPOSAL FORMAT AND CONTENT**

***i. REJECTION OF NON-RESPONSIVE PROPOSALS:***

*Respondents will be eliminated from consideration for any of the following reasons:*

1. *Proposals that simply reiterate the verbiage of the RFP and do not provide substantive information will be considered non-responsive and rejected. (It is hoped that responders will indicate how they intend to accomplish the task outlined in this RFP not simply state that a given task will be accomplished.)*
2. *Proposals that are incomplete and do not contain each of the required items listed in the Proposal Requirements section will be rejected as non-responsive.*
3. *Proposals that are not submitted by the stated deadline will not be considered.*
4. *Bidders are encouraged to propose alternative solutions that address or enhance the project goals, and will not be penalized for including optional elements, including those that may fluctuate expenses, during the selection process.*

[Return to Content Section](#)

**ii. PROPOSAL REQUIREMENTS**

*The submitted proposals must be in the following format:*

1. *Executive Summary*
2. *Approach and Methodology*
3. *Project Deliverables*
4. *Project Management Approach*
5. *Detailed and Itemized Pricing*
6. *Company Overview*
7. *Project Team Staffing*
8. *Appendix: References*

**EXECUTIVE SUMMARY**

*This section will present a high-level synopsis of the Vendor's responses to the RFP. The Executive Summary should be a brief overview of the engagement, and should identify the main features and benefits of the proposed work.*

**APPROACH, AND METHODOLOGY**

*Include detailed procedures, timeline, and technical expertise. This section should include a description of each major type of work being requested of the vendor. All information that is provided will be held in strict confidence. Contractors should describe trade-offs in cost and rigor among proposed options.*

**PROJECT MANAGEMENT APPROACH**

*Include the method and approach used to manage the overall project, stakeholder engagement, and client correspondence. The contractor should note that they will be required to furnish all labor, management, facilities, supplies, equipment, and material, and do all tasks necessary for the performance of the work specified. Additionally, the contractor shall provide adequate professional supervision and quality control to assure the accuracy, quality, completeness, and progress of the work.*

**DETAILED AND ITEMIZED PRICING**

*Include a fee breakdown by project phase and estimates of expenses. Use the following categories:*

- *Salary and Fringe*
- *Travel*
- *Meetings*
- *Supplies*

- *Telecommunications*

**COMPANY OVERVIEW**

*Description of the firm, statement of qualifications and experience doing the type of work requested, and previous experience working together as a team, including sub-consultants and external stakeholders.*

**PROJECT TEAM STAFFING**

*Include biographies and relevant experience of key staff and management personnel, including developing partnerships and acquiring necessary permits.*

**APPENDIX: REFERENCES**

*Provide the names and contact information of three people willing to serve as current references for which you have performed similar work.*

[Return to Content Section](#)

**iii. OPTIONAL ELEMENTS:**

*Proposals may include any identified optional elements; however, optional elements should be so labeled. An analysis of the general trade-offs and costs shall be provided for each identified element. Undesirable or lacking optional elements shall not count against a proposal in the selection process; however, attractive elements may contribute to the final selection of a proposal assuming the minimum qualifications are met and the scope of work meets the evaluation criteria.*

[Return to Content Section](#)

**iv. FAVORABLE CONSIDERATIONS - LEVERAGING FEDERAL AND PRIVATE INVESTMENTS**

*Proposals that complement or leverage projects on federal lands that were funded through Department of the Interior's Sandy Supplemental Mitigation Funds or private lands managed by a land trust are highly desirable. Furthermore, the City strongly favors habitat and restoration goals of the Department of the Interior and its bureaus and projects that complement state and local conservation priorities, including State Wildlife Action Plans (SWAPs).*

[Return to Content Section](#)

**IV. SELECTION CRITERIA/EVALUATION** (Foundation, National Fish and Wildlife, 2014)

**SCORING SYSTEM FOR ELIGIBLE PROPOSALS:**

*A proposed project is eligible, if it meets all of the following criteria, and there is consensus among the review team members that the proposal has adequately addressed all considerations addressed in this RFP:*

*The following **criteria and scoring** will be used in evaluating proposals and awarding a contract:*

**1. TECHNICAL APPROACH (50 points):**

- Quality and appropriateness of the work plan and proposed methodology related to the services required and community vision – demonstrated technical competence;*
- Utilization of nature-based solutions or some combination of nature-based solutions with traditional infrastructure.*

- ii. *Increases community resiliency, such as reducing vulnerability to the growing risks from [coastal storms, sea level rise, flooding, erosion and associated threats] by strengthening or harnessing natural ecosystems.*
  - iii. *Integrates environmental and social concerns into the design and development process. [OR: Addresses [health, social, economic, biodiversity, etc.] concerns as a secondary function of the project.]*
  - iv. *Includes analysis of expected timeline for benefits to be realized (i.e., speed to functionality), including secondary benefits, and have a positive impact on natural systems and the community, both socially and economically;*
  - v. *Provides cost/benefit analysis of alternative solutions.*
  - vi. *Includes recommendations or letter of opinion from design team's construction manager and/or maintenance stewards regarding the implementation and long-term success of the project.*
- b. *Benefits are substantial and measurable over a long period of time, require minimal re-investment or operational costs after project completion, and long-term funding mechanism for O&M determined;*
  - c. *Project eligible for federal/state assistance or leverages similar local and regional projects or provides additional optional elements;*
  - d. *Public outreach strategies are sufficient and communicate the right message to the appropriate audience;*
  - e. *Proposal applies the ISI Envision evaluation and rating tools to evaluate the sustainability of each alternative.*
  - f. *Clear and reasonable schedule and deadlines that agree with Department's needs.*
2. **SPECIALIZED EXPERIENCE (30 points):**
- a. *Previous successful experience in performing similar [restoration, modelling, construction, etc.] projects and understanding of challenges in the project site area, including unique topography, soil conditions, condition/capacity of existing drainage system, amount of rainfall received annually, and native vegetation;*
  - b. *Expertise or subcontractor expertise in placemaking, including urban and open space design.*
  - c. *Previous success coordinating multi-stakeholder, multi-benefit, collaborative ventures;*
  - d. *Knowledge of policy, permitting, and programs, and contacts with key agencies such as the Department of Natural Resources, U.S. Army Corps of Engineers (USACE), and local resource managers;*
  - e. *Demonstrated expertise in tribal engagement, historical and/or archeological significant sites, contaminated sites, waste disposal, etc.*
  - f. *Experience in receiving federal or other government funds, reporting financial and programmatic information with regard to a project on a periodic basis, and segregating federal or other government funds within accounting records.*
  - g. *Experience with ISI's Envision Sustainable Infrastructure Rating System. Proposal provides example project(s) to which the applicant has applied this system and the outcome of the application.*
  - h. *Service guarantees and warranties offered by Respondent.*
3. **PERSONNEL (20 points):**
- a. *Demonstrated ability to perform the requested technical and scientific assessment, community interface, design, engineering, research, analytical, construction management and/or inspection services;*

- b. *Organizational, administrative and staffing capabilities, including knowledge of holistic resilience strategies; experience designing and overseeing, key personnel availability, and current workload;*
  - c. *Recent experience (within the past 5 years) in delivering projects using both traditional acquisition processes such as Design-Bid-Build.*
  - d. *[For traditional design-bid-build projects], design team includes build professional or is advised by a build professional who will submit a recommendations report to the design plan.*
  - e. *[For design-build-maintain projects], design team includes a construction manager and at least one maintenance steward to aid long-term success in the O&M of the project.*
  - f. *At least one member of the project team is certified as an Envision Sustainable Professional;*
  - g. *Maintenance of office or residence within project site state lines;*
4. **APPROACH TO QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) (10 points):**
- a. *Quality assurance and control shall be provided for all Work Orders completed under this contract. This involves maintaining communications with the Department and other stakeholders as identified by the Department. This shall include development and implementation of sampling and analysis plans, scope and budget progress monitoring, and administrative support for budget monitoring and invoicing. Quality assurance and control shall not exceed 10% of the total project budget of \$XXX,XXX.*
  - b. *The Department will evaluate the Proposer's approach to QA/QC with respect to this Contract. The Department will evaluate the following elements:*
    - i. *Development and implementation of procedures by the Proposer to ensure that quality is an integral consideration in the completion of each task.*
    - ii. *Independent verification of workmanship and quality control procedures.*
    - iii. *Inspection of work in progress rather than at completion of work components.*
    - iv. *Communication with the Department and its representatives regarding quality issues and project changes.*
    - v. *As-built surveys (Even if local authorities don't require them, a good contractor may call for an as-built survey several times during the course of the project to make sure the building is proceeding according to plan, as well as to measure the progress of construction against the projected timeline for completion. If mistakes or variances have occurred during construction, it's much easier and less costly to make these adjustments along the way than after everything is completed).*

[Return to Criteria Section](#)

**V. SELECTION PROCESS** (Sasaki Associates, Inc. & City of Norfolk Department of Public Works, 2016) (City of New Orleans, 2015)

***SELECTION COMMITTEE:***

*A committee comprised of qualified reviewers within the Department, or any qualified reviewer appointed by the Department, will judge the merits of the proposals received in accordance with the criteria defined in this RFP. The Selection Committee members shall first evaluate the proposals on the basis of criteria other than price. The members shall either complete the numerical grading and provide a written explanation stating the reasons for the rating for each criterion, or if using wholly qualitative evaluation criteria, the members shall provide a rating of a proposal as highly advantageous, advantageous, not advantageous, or unacceptable and state the reasons for the rating for each criterion. The Department*



*retains the option and authority to involve additional parties external to the Department and the selected consultant in the implementation of the Scope of Work. The Department staff will provide guidance to the selected consultant on the involvement of external staff.*

*During the review of any Submission, the Selection Committee may:*

- *Conduct reference checks relevant to the Project with any or all of the references cited in a Submission to verify any and all information, and rely on or consider any relevant information from such cited references in the evaluation of Submissions;*
- *Seek clarification of a Submission from any or all Respondents and consider such supplementary information in the evaluation of Submissions; and*
- *Request interviews/presentations with any, some or all Respondents or Team Members to clarify any questions or considerations based on the information included in Submissions during the evaluation process, and consider any supplementary information from interviews/presentations in the evaluation.*

[Return to Process Section](#)

## REFERENCES

- Baumann, C. (2017, April). North Olympic LE for Salmon Recovery. (V. Leung, Interviewer)
- Braun, M. (2017, March 13). Founder, Friends of Winooski River. (V. Leung, Interviewer)
- Chartered Institute of Procurement & Supply (CIPS) & National Institute of Governmental Purchasing, Inc. (NIGP). (2016). Global Best Practice: Specifications. CIPS & NIGP.
- City of New Orleans. (2015, April 22). Request for Qualifications. New Orleans, LA.
- County of King, Finance and Business Operations Division. (2002, December 3). WATERSHED STRATEGIC ASSESSMENT PROJECT. Seattle, WA.
- Foundation, National Fish and Wildlife. (2014). Hurricane Sandy Coastal Resiliency Competitive Grants Program, Request for Proposals. United States of America.
- Philipsborn, J. (2017). Associate Vice President, Climate Adaptation Practice Director, AECOM. (V. Leung, Interviewer)
- Rosenbluth, J. (2017, September 1). Regional Sales Manager, Omni Ecosystems, certified WBE by the City of Chicago. (V. Leung, Interviewer)
- Sasaki Associates, Inc. & City of Norfolk Department of Public Works. (2016, August 26). Request for Proposal: National Disaster Resilience Competition (NDRC) - Ohio Creek - Design Services.
- Sasson, A. (2017, March 15). Freshwater Conservation Manager, The Nature Conservancy. (V. Leung, Interviewer)
- Weisshaar, M. (2017, August 17). Volunteer Attorney, The Nature Conservancy. (V. Leung, Interviewer)
- Wildlands Restoration Volunteers. (2013, January 8). Request for Proposals: Big Thompson River Restoration Master Planning. Colorado.
- Yaro, R. D., Arendt, R. G., Dodson, H. L., & Brabee, E. A. (1989). *Dealing With Change in the Connecticut River Valley: A Design Manual for Conservation and Development*. Lincoln of Land Policy and the Environmental Law Foundation.

## Acknowledgements

We are thankful to our colleagues Anne-Marie Aldous, Anthony Sasson, Ashby Nix Worley, Bob Carey, Brian Boutin, Dale Turner, Jeff DeQuattro, Johnny Wilson, Kahlil Kettering, Kirk R. Klausmeyer, Laura Geselbracht, Mark Weisshaar, Michelle L. Brown, Sara Burns, Sara J. Gottlieb, Seth Blich, Stephen Long, Steve Cann, Susan Hortenstine, Susan Tatayon, and Thomas Abello who provided connections and expertise that significantly assisted the research and interpretations provided in this paper.

We are also grateful to Brandy Wilson, Cheryl Baumann, Dave Shreffler, Jason Hellendrung, Jason Sweet, Jesse Rosenbluth, Jill Allen Dixon, John Malueg, Jon Philipsborn, Michael Sabbaghian, Michele Braun, Stephen Estes-Smargiassi who provided expertise that greatly improved the content of this guide.