

ATTACHMENT A

Needs and Capabilities Assessment (NCA)

Most communities already possess many of the ingredients needed for successful watershed management. With a little thought, you should be able to recognize regulations that mandate watershed restoration or protection, local staff that can provide technical and programmatic assistance, and potential funding sources you can use to build an effective watershed program. The **Needs and Capabilities Assessment (NCA)** is a simple tool to help you quickly organize known programs and resources that can be potentially applied to watershed protection and restoration, as well as identify potential resources you may not have considered.

➡ *Please take a few minutes to complete the following questionnaire for a specific watershed. If your watershed contains multiple jurisdictions/communities, choose the one that has the most area or land use authority in the watershed. The NCA is divided into five sections designed to identify existing resources you can use as support for protection and restoration activities.*

Part 1. Regulatory Forces Driving Watershed Planning

This part examines federal and state “regulatory drivers” that influence watershed management in the region and can possibly provide financial or technical resources for implementation. Such drivers may include regulatory mandates of the Clean Water Act, Safe Drinking Water Act, Endangered Species Act, and regulations such as TMDLs, MS4 NPDES storm water permits, or Source Water Control Plans.

Part 2. Local Agency Capacity

This part is used to discern local program capability for watershed protection, data availability, restoration and protection experience, and funding and mapping resources.

Part 3. Your Local Agency Restoration Rolodex


This part identifies key local agencies and staff to involve in watershed planning in your area. You should get to know these people and programs and integrate them into your protection and restoration efforts.

Part 4. Adding Non-local Government Partners to Your Rolodex

This part helps recruit additional stakeholders and resources outside of local government such as private, non-profit, regional, state, or national partners that can provide financial, technical, or programmatic assistance for your watershed planning and implementation.

Part 5. Community Attitudes

This part identifies current community attitudes towards streams, wetlands, and watersheds. Community support can make or break your efforts. Smart watershed managers have their finger on the pulse of the community and can utilize local media and community groups to target their restoration and protection endeavors.

Note that questions with the  symbol were inserted into the NCA as part of an EPA-funded project to integrate wetland and watershed planning.

Part 1. Regulatory Forces Driving Watershed Planning

1. Does my community have a Phase I or II EPA NPDES storm water permit? Yes No Don't Know

If so, local municipalities are required to meet a set control measures to minimize stormwater impacts. These measures include implementing education and outreach, stormwater retrofits, illicit discharge detection and elimination programs, etc that you can leverage for support.

2. Are any waters in your watershed not meeting water quality standards? Yes No Don't Know

If yes, a TMDL that deals with NPS controls may need to be developed. If not, you may have identified some high quality streams or wetlands that you may want to focus your protection efforts on (i.e. land conservation, better site design, and stringent stormwater criteria)

3. Does your community have combined or sanitary sewer overflows? Yes No Don't Know

If yes, then your community would certainly benefit from stormwater reduction activities. Alternatively, municipalities may be in the process of sewer separation and outfall modifications that might be linked with your riparian restoration efforts

4. Is your watershed part of a drinking water supply? Yes No Don't Know

If so, then you are set! Many sole-source drinking water watersheds require a Source Water Protection Plan. Tap in (no pun intended)!


5. Are endangered species present in your watershed? Yes No Don't Know

If so, watershed activities may be prompted under the ESA (i.e. Pacific salmon, Barton Springs salamander, etc). Think about how your community should adapt its land use planning and stormwater management practices to better protect these species.

6. Is your watershed encompassed within a regional or multi-state watershed agreement, a coastal management program, or a national estuary program? Yes No Don't Know

If so, look to MOUs and agreements, mitigation ratios, 6217, and NEP program guidance to assist in establishing watershed goals or providing financial or technical support for planning efforts.


7. Are any specially-designated wetlands located in your watershed? Yes No Don't Know


 *State Wetland Conservation Plans, Special Area Management Plans, Advanced Identification, and other assessments and reports may have identified wetlands with special designation (such as outstanding natural resource waters) due to high functional value or high quality. Funding may be available for implementing conservation and restoration projects in these watersheds, and these sites should be recommended as priorities for mitigation..*


8. Is environmental protection or enhancement a strong factor in local land use decisions, redevelopment incentives, or transportation planning? Yes No Don't Know

If so, consider utilizing local environmental regulations to support your efforts (i.e., forest conservation, stormwater utility, wetland protection, environmental overlay districts, open space requirements, buffer ordinances, incentive programs).

If not, then you may have some work to do.

 **9. Are wetland alterations frequently permitted in your watershed?** Yes No Don't Know
If so, you may want to become intimately familiar with federal 404 wetland protections, 401 WQ certification, and other features of the Clean Water Act designed to help you protect your water resources.

 **10. Does your state or local community have its own wetland protection regulations?** Yes No Don't Know
If so, you are in luck. Some states/locales have adopted protection standards more stringent than federal requirements. Some provide protection for wetland types or sizes that are not currently protected by the federal program; others require wetland buffers, or regulate activities that are not addressed by the federal program.
If not, you may consider pursuing adoption of local wetland protection regulations, since federal regulations may not protect all critical wetland resources. These local regulations can employ additional site development criteria to protect both wetlands and the areas that drain to them.

 **11. Does your watershed have potential recharge areas?** Yes No Don't Know
If so, these areas may be critical for maintaining the quantity and quality of groundwater supplies, wetlands, and other hydrologic features. Many communities have land use planning criteria for recharge areas that you may be able to use.

 **Do you have any untapped regulatory resources in your community? (Try listing at least 2)**

1.


2.

Part 2. Local Agency Capacity

12. Have any watershed studies, plans or research been conducted in the past ten years? Yes No Don't Know
Check around, most watersheds have been studied by someone in the past, and the data and mapping can help set a baseline.

13. Does an interagency workgroup exist to coordinate watershed issues? Yes No Don't Know
If so, infiltrate its inner circle. At a minimum, these folks should be added to your stakeholder tree. If not, this is a perfect role for a local watershed group.

14. Is there a local staff person who acts as a watershed coordinator? Yes No Don't Know
If so, this person should become your new best friend. Have this person review your stakeholder list.

 **15. Does an interagency workgroup exist to coordinate wetland restoration and protection efforts?** Yes No Don't Know
Consider as part of a larger watershed workgroup, having a subcommittee dedicated to coordinating wetland mitigation, permitting, protection, tracking, and assessment efforts.

16. **Do you know which agencies are responsible for collecting water quality samples and other monitoring data?** Yes No Don't Know

Think about it, folks who collect this data really want it to be used. If you know who has it, not only can they help you understand your watershed, but they can also provide critical assistance in performing or designing monitoring efforts. Add them to your stakeholder list.

17. **Do existing public outreach education programs exist?** Yes No Don't Know

If so, you should coordinate efforts. While local programs may have existing materials and resources you can use, you may be in a position to help target those programs to priority neighborhoods or business areas in the watershed.

If not, why not? This may be a niche for local watershed groups.



18. **Do local wetland protection or storm water management regulations require local engineers to evaluate stormwater impacts on downstream wetlands?** Yes No Don't Know

If so, there may be access to hydrologic data for your watershed. This data may be able to assist you in identifying vulnerable wetlands, running models to predict loss of wetland functions, and identifying restoration opportunities.

19. **Is local engineering staff engaged in storm water retrofitting?** Yes No Don't Know

If so, there may be local capacity to help design, finance, construct, or maintain priority retrofits in your watershed. Additionally, you may be able to generate volunteers or coordinate demonstration programs for local retrofits. Add them to your stakeholder list. If not, watershed groups can provide this service for local governments, particularly those under pending Phase II permits.

20. **What local agency owns the largest blocks of land in your watershed?** Schools Parks Utility Golf course Municipality Don't Know

You may be surprised to see how much land is publicly owned in your watershed. Get to know these managers because some of the most feasible restoration projects occur on publicly owned land. Consider which protection techniques to apply to surrounding or upstream or neighboring parcels to help maintain the quality of this open space.

21. **Are any green way, wetland mitigation, or waterfront revitalization efforts planned or underway in your watershed?** Yes No Don't Know

If so, these are great opportunities for you to slip in some restoration projects and educate watershed residents on proper buffer and landscape practices.





22. **Have any inventories been conducted to evaluate natural area remnants (e.g forests, wetlands, or open space)?** Yes No Don't Know

Some communities have compiled detailed inventories of remaining forest, parks, and wildlife areas—these can be extremely helpful in identifying natural area remnants before going out in the field. Wetland inventories are harder to come by, particularly information on condition, function, and restorability.



23. **Does your community have a sense of which remaining natural areas are likely to be threatened by development?** Yes No Don't Know

Development often fragments forests and directly or indirectly alters wetland function. Ask yourself if your community even knows what your forest and wetland functions are or which ones you will likely lose as the watershed develops.

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-  **24. Has your community identified sensitive wetland communities and high quality wetlands?** Yes No Don't Know
- Some communities have identified their wetlands that are considered sensitive to storm water runoff, which include high quality wetlands that are conservation priorities. These wetlands are identified so that they can be protected through more stringent development criteria within their drainage areas.*
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-  **25. Does your community maintain natural resource maps at the local scale (i.e. wetlands, forest cover, open space, sensitive habitats)?** Yes No Don't Know
- GIS has made it easier to refine and update large scale mapping information as local surveys and ground-truthing are conducted. The National Wetlands Inventory, for example, is not detailed enough to identify all wetlands at the small watershed scale, but can be updated using GIS.*
- Check to see if your community's development review process requires updating GIS maps with delineated natural resource areas.*
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-  **26. Has your community delineated contributing drainage areas to sensitive or high quality wetlands?** Yes No Don't Know
- Few have, despite the importance of managing surface drainage that is critical for sustaining wetland hydrology. This may be a chance to provide better wetland protection from indirect storm water impacts.*
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- 27. Are flood plains mapped and managed based on FEMA requirements?** Yes No Don't Know
- In order to get federal flood insurance, many communities have mapped their flood plains and modeled flood prone areas. This fine scale data can be helpful in stream corridor analysis.*
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- 28. Does a storm water utility or other dedicated funding mechanism exist for storm water infrastructure maintenance or upgrades?** Yes No Don't Know
- A growing number of communities have established a utility to support storm water planning and maintenance, which can be a dedicated source of funding for watershed restoration.*
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-  **29. Does a wetland mitigation bank exist for your watershed area?** Yes No Don't Know
- If so, this indicates that compensation for unavoidable impacts to wetlands is being provided through funding from local development projects. However, mitigation success has been variable, so you may want to find out who has oversight of the bank, conducts monitoring, and evaluate the process for selecting banking sites.*
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- 30. Do capital or operating budgets exist that can be used or leveraged for watershed-related purposes?** Yes No Don't Know
- Examine local capital and operating budgets to find line items and program areas that are related to watershed management.*
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- 31. Do you understand the procurement pathways for municipal contracting for restoration design and construction?** Yes No Don't Know
- Most restoration projects are built using local dollars, so it helps to know the municipal contracting process to develop restoration projects.*
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- 32. Has the community received any environmental grants available from state or federal agencies in the last two years?** Yes No Don't Know
- Check with your state environmental agency(ies) to see what grants are available and what has been previously awarded. EPA also maintains a list of federal grants for watershed and wetland restoration. Review the project reports for previous grants.*
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 **Is your community watershed capacity lacking in any areas?** *(Try listing at least 2)*

1.

2.

Part 3. Your Local Agency Watershed Rolodex

33. Do you know what agency is primarily responsible for mapping & GIS? Yes No Don't Know
 Agency: _____
 Name: _____
 Phone: _____
If so, find a contact and take them out to lunch. You might be surprised at how willing these folks can be to help (and how useful their skills are!).

 **34. Do you know what local agency is primarily responsible for conducting stream or wetland assessments?** Yes No Don't Know
 Agency: _____
 Name: _____
 Phone: _____
These folks can be great sources of information and can probably quickly tell you where sensitive and degraded areas are in the watershed. Consider working with them to collect data you need for watershed planning efforts.

35. Do transmission lines cross your watershed? Yes No Don't Know
 Contacts: _____
If yes, get to know the power and phone companies. These guys can be great financial partners in riparian restoration and stream stabilization projects.





36. Do any units handle land stewardship within the local parks agency? Yes No Don't Know
 Contacts: _____
Most local park agencies have naturalist, biologists and other staff that manage natural areas. Be sure to enlist them to spread the stewardship message and provide support on protection and restoration projects.


37. What agency handles street and storm drain maintenance? Agency: _____
 Name: _____
 Phone: _____
Street sweeping, catch basin cleaning and storm drain maintenance are usually handled by the public works department. These folks play a strong role in restoration through their municipal pollution prevention efforts. Don't Know

38. Which department handles storm water and flood plain management functions? Agency: _____
 Name: _____
 Phone: _____
These folks are critical partners in reviewing stormwater plans, as well as constructing storm water retrofit, stream restoration, and wetland restoration projects. Don't Know

39. Which agency coordinates emergency spill response? Agency: _____
 Name: _____
 Phone: _____
Preventing polluted runoff at storm water hotspots is an important element of watershed protection. These people can help identify pollution risks and develop pollution prevention and spill response plans. Don't Know

40. Which utilities manage the sanitary sewer network and if they are in compliance? Utility: _____
 Name: _____
 Phone: _____
If yes, get to know them because these folks collect money for cleaning water. Take them to lunch. Sewer lines often run along stream corridors and cross wetland complexes, so these folks will be integral to your efforts. Don't Know

<p>41. Who is responsible for pollution prevention compliance at municipal operations? <i>Good housekeeping for municipal operations is not only a NPDES Phase II requirement, but is also a good way to demonstrate environmentally sensitive practices.</i></p>	<p>Agency: Name: Phone: <input type="checkbox"/> Don't Know</p>
<p>42. Which agency handles household hazardous waste, used oil recycling, composting and other personal stewardship programs? <i>Consider integrating watershed education (i.e., downspout disconnection, proper lawn maintenance, pet waste, buffer management) with these existing homeowner stewardship programs.</i></p>	<p>Agency: Name: Phone: <input type="checkbox"/> Don't Know</p>
<p>43. Do you know the unit that plants and maintains trees? <i>If not, find them. You probably have a lot of public land in need of reforestation and street trees, and these folks can be a great source for planting materials and equipment.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Agency: Name: Phone:</p>
<p> 44. Do you know who designs and constructs wetland and stream restoration projects? <i>If not, you need to start looking. Successful wetland and stream restoration can be elusive and projects can easily become expensive failures. Experienced contractors as well as designers can be hard to find in small communities.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Company: Name: Phone:</p>
<p>45. Do you know the department that handles development review and land use planning? <i>Watershed development can negatively impact stream and wetland quality, and there are many stages along the land development process where environmental safeguards can be applied. Get to know local process and find out where your input is most valuable.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Agency: Name: Phone:</p>
<p> 46. Do you know who reviews/establishes stormwater management or drainage criteria? <i>If you want to protect sensitive resources, you may need to convince this person to require more stringent design criteria, performance monitoring, and proper maintenance.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Agency: Name: Phone:</p>
<p> 47. Do you know what agency reviews/establishes grading requirements or oversees erosion and sediment control implementation? <i>Site construction can be one of the most critical phases of the development cycle in terms of impacts to streams, wetlands, and other receiving waters. ESC often fails due to improper practice installation and maintenance, so you may want to encourage enhanced enforcement in sensitive areas (i.e. upstream of sensitive wetlands). Since many developing communities don't have the staff to keep up with ESC inspections, watchdog watershed groups can make a huge difference</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Agency: Name: Phone:</p>
<p> 48. Do you know who enforces local protection of natural resources, such as trees and forests, open space, wetlands, and their buffers? <i>These inspectors and enforcers are often overworked, and may need some additional resources to account for new requirements, such as inspection and enforcement of wetland buffers.</i></p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't Know Agency: Name: Phone:</p>

 **49. Do you know who tracks septic system installation and maintenance?** Yes No Don't Know

If so, congratulations. Very few communities have a good grasp on how many septic systems are in their watershed, much less how well they are maintained until there is a significant problem.

Agency:
Name:
Phone:

 **Who in the local government is missing from your rolodex? (Try listing at least 2)**

1.

2.

Part 4. Adding Non-Local Government Partners to Your Rolodex

50. Is there a recognized watershed group in your watershed? Yes No Don't Know

Watershed groups can be a great resource for local governments because they can often mobilize volunteers, receive grants, and—when trained—perform watershed assessment and planning functions.

Group:
Name:
Phone:

51. Do any colleges or universities exist within 30 miles of your watershed? Yes No Don't Know

If so, consider all the free academic research and graduate student labor you can direct towards your watershed. You may also be able to tap into the scientific community (e. g., Society of Wetland Scientists), student environmental groups, or use library resources.

University:
Name:
Phone:

52. Are local civic associations in your rolodex? Yes No Don't Know


Garden clubs, scout troops, church and youth groups, neighborhood association, etc are a terrific source for volunteers. Get these folks engaged in riparian plantings and rain barrel programs at a minimum.

Group:
Name:
Phone:

53. Do any regional organizations have resources or expertise to lend to the watershed effort? Yes No Don't Know

Think outside the box. Do you have any non-profits in your area that can contribute to the watershed effort? Think about councils of governments, soil and water conservation districts, extension agencies, and "friends of" groups.

Group:
Name:
Phone:

 **54. Are there any national organizations that might have an interest in your watershed?** Yes No Don't Know

What about Ducks Unlimited, Trout Unlimited, or the Nature Conservancy—these groups are great advocates for wetland and habitat protection!

Organization:
Name:
Phone:

55. Do developable areas still exist in your watershed? Yes No Don't Know

If so, get to know your local homebuilders association. Let them take you out to lunch. Open space design can be mutually beneficial to builders and environmentalists. In some cases, additional conservation and restoration or opportunities may present themselves. If not, keep your eye open for storm water retrofit, wetland restoration, and land reclamation opportunities. Opportunities for improving storm water treatment may also be found during redevelopment.

Group/Company:
Name:
Phone:

56. Are there large tracts of state, federal or institutional land present in the watershed? Yes No Don't Know

If so, these landowners should be invited to participate in the planning effort. If there are large tracts of privately held land, landowner interviews will be critical to generating support for conservation easements and land stewardship.

Name:
Phone:

57. Do any land trusts exist in the area? Yes No Don't Know


Protection of remaining wetlands, contiguous forests, steep slopes and special habitats is integral to overall watershed management. If the local government does not have the capacity to manage conservation easements, consider a land trust as a viable legal alternative.

Group:
Name:
Phone:

58. Do any state or federal agencies have gauges or monitoring stations in the watershed? Yes No Don't Know

Unlike local or academic monitoring, the USGS and many state agencies have the ability to provide long-term monitoring. If monitoring stations exist, take advantage of the information to establish baseline conditions and track watershed changes over time. If not, consider building a case for gauge installation.

Agency:
Name:
Phone:

 **59. Do you know any private-sector environmental consultants?** Yes No Don't Know

These folks may be tapped for conducting functional wetland assessments, updating local GIS databases, designing restoration projects, or identifying conservation and restoration opportunities.

Company:
Name:
Phone:


60. Do you know who covers the environmental beat? Yes No Don't Know

Get to know one or two local reporters who you can call to cover watershed-related issues and events.

Paper/News:
Name:
Phone:

61. Are any GIS mapping layers available from non-local sources? Yes No Don't Know


Don't assume that the data is not available just because your local government does not have a well-developed or accessible system. A variety of internet sites (www.datadepot.com, USGS, etc) where you can download data for a small fee.


 **62. Do you know who is in charge of Section 404 permitting for jurisdictional wetlands in your watershed?** Yes No Don't Know

The Army Corp of Engineers is generally responsible for granting permits and approving wetland delineations for federally protected wetlands. The EPA has veto authority over the USACE decisions. Interested states can assume authority over the Section 404 permitting program—a small number have done so to date.

Some states or localities also require permits for impacts to wetlands, so another thing you should consider is the working relationship between local or state reviewers and federal permitters.

Agency:
Name:
Phone:

 **63. Are there any roadway construction projects in your watershed?** Yes No Don't Know
State DOTs are some of the worst wetland offenders out there. As a result, they often generate huge pots of money for wetland mitigation projects! Name: _____
Phone: _____

 **Who else is missing from your rolodex? (Try listing at least 2)**

1.

2.

Part 5. Community Attitudes

64. What are the primary water resource concerns in the community? Yes No Don't Know
Be aware that the public may not share the same watershed concerns that you do. Successful planning requires input from diverse interests and the integration of seemingly disparate objectives within watershed goals (flooding, air quality, economic growth, historic preservation, etc).

65. Is your local watershed a popular recreational destination? Yes No Don't Know
If so, that's great news because there is no better way to generate public support for watershed activities than to link them to recreational amenities. Enlist hiking, biking, canoeing, duck hunting, and other recreational groups to your cause. If not, maybe you can work towards that goal.

66. Is the general public's basic level of watershed awareness relatively high in your watershed? Yes No Don't Know
If so, you should patent your secret formula!
If not, don't be discouraged, not many communities can boast such a well-rounded populace. Stakeholder involvement must be targeted at many levels ranging from local government staff to neighborhoods to individual homeowners. Each step in watershed planning should contain a public component designed to engage and inform your local community.

67. Are elected officials or senior agency staff aware of the term watershed management? Yes No Don't Know
If framed in the right way, watershed management can be politically popular because it provides services to constituents in the neighborhoods and public areas.

68. Has the local press/media covered your watershed in the past 3 months? Yes No Don't Know
If not, why not? These people are always looking for community feel good stories, so give them something to write about. Call up your local reporters and have them come out with you in the field or advertise a big event. This is a great way to begin educating the public and giving recognition to supportive local officials and staff.



69. What are the local attitudes towards wetlands?

Amenity Nuisance

Don't Know

Are wetlands viewed as an amenity or as a nuisance (e.g., mosquito pits)? Hopefully your community recognizes the many benefits wetlands provide, if not, wetland protection may be difficult. You'll want to start making a list of the specific services your wetlands provide (shellfish, drinking water filters, nutrient processing, flood prevention, etc)—particularly the economic benefits—and start educating!

Comments/Notes:

