Lower Delaware Wild and Scenic River Recreational Use and Capacity









submitted to the Lower Delaware Wild and Scenic River Management Council

> by The Shimoda Group, LLC July 15, 2021

Executive Summary

This is the final report of a study of recreational use for the Lower Delaware Wild and Scenic River. It provides the basis for future management planning by the Lower Delaware Wild and Scenic River Management Council.

The Lower Delaware Wild and Scenic River has enjoyed an increasing level of popularity since its designation as a Wild and Scenic River in November 2000. Recreation and economic development are values for which the river was protected, along with water quality, natural resources, historical resources, and open space preservation.

The Lower Delaware Wild and Scenic River community has been aware that a river can be "loved too much." The 2007-2011 Action Plan sought to address increased use. It also addressed adverse impacts to water quality, riparian health, and the effects new recreational use may have on the social fabric of the corridor. While many prescribed actions have been completed, the activities did not include metrics to monitor or manage recreational use. Without a system to understand an "acceptable level," it is impossible to discern when the acceptable level has been exceeded. This study sought to identify priority issues from the perspectives of residents, river users, municipal leaders, agency staff, non-profit leaders, and business owners and recommends strategies to balance river use with the protection of the river's health.

Activities conducted for this review included an inventory of access sites, an online survey to identify the recreational user perspectives, a town hall-style public meeting to seek additional input, and one-on-one interviews. An Interim Report submitted in June 2021 offered an initial assessment of use and trends.

Thanks go to the many individuals who took the time to take the online survey form, meet for one-on-one interviews, and attend the town hall meeting. Extra thanks to the professional staff who work for the States of Pennsylvania and New Jersey, Northampton County, Pennsylvania, and municipal leaders who have responded, coped, and in some cases thrived amidst the extraordinary circumstances related to the national COVID-19 pandemic.

This work has been made possible through several discussions and receipt of input from many individuals who live, work, and play on and alongside the Lower Delaware Wild and Scenic River. We are grateful to them for their time, patience, and input. Notable are Sarah Bursky (National Park Service), Maryann Carroll (Delaware River Greenway Partnership), Bryan Cope (Northampton County), Richard Dodds (Lower Delaware Wild and Scenic River Management Council), John Mauser (Lower Mt. Bethel Township, PA), Rob Castagna (Milford, NJ), Patricia Kallesser (NJ Department of Environmental Protection), Cindy Kunas (Greater Lambertville Chamber of Commerce), Ross McLennan (Bucks County), and Mark Zakutansky (Delaware River Water Trail).

This study was conducted by The Shimoda Group, LLC with funding from the Lower Delaware Wild & Scenic River Management Council supported by the Wild & Scenic River Partnership Program of the National Park Service (NPS).

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National Wild and Scenic Rivers Act

The Lower Delaware Wild and Scenic River and its three tributaries are protected from degradation through federal legislative action. They became federally protected on November 1, 2000, for the values identified in the <u>Lower Delaware Wild and Scenic River Management Plan</u>.

The National Wild and Scenic Rivers System was created by Congress in 1968 (Public Law 90-542; 16 U.S.C. 1271 et seq.) to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations. The Act is notable for safeguarding the special character of these rivers while also recognizing the potential for their appropriate use and development. It encourages river management that crosses political boundaries and promotes public participation in developing goals for river protection.

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dams and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes. (Wild & Scenic Rivers Act, October 2, 1968)

Rivers may be designated by Congress or if certain requirements are met, the Secretary of the Interior. Each river is administered by either a federal or state agency. Designated segments need not include the entire river and may include tributaries. For federally administered rivers, the designated boundaries generally average one-quarter mile on either bank in the lower 48 states and one-half mile on rivers outside national parks in Alaska in order to protect river-related values¹.

¹ About the Wild and Scenic Rivers Act. https://www.rivers.gov/wsr-act.php

The Partnership Wild and Scenic Rivers Management Model



Partnership Wild and Scenic Rivers (PWSR) are administered by the Secretary of the Interior through the NPS in partnership with local governments, councils, watershed groups, and nongovernmental organizations. PWSR communities are charged with protecting their outstanding rivers and river-related resources through collaboration². A <u>toolkit</u> has been developed to support PWSR management with technical information and best practices. The good news is that rivers do not have to flow through federal land to be eligible for protection through the Wild and Scenic Rivers System. The reality is that managing a PWSR requires patience, time, and tenacity.

Trends in Outdoor Recreation



Outdoor Recreation Growth in 2020 and Beyond

The perception that outdoor recreation grew significantly in 2020 is well-documented. After an initial national shutdown in early spring 2020, individuals and families sought relief from COVID-19 seclusion by heading outdoors. Walking, running, and paddling provided a relatively safe means to get some exercise when team sports, games, and outdoor entertainment were not available. Data supports the experience of Pennsylvania and New Jersey State and county parks. Limited supplies and restrictive sanitation requirements forced bathroom facilities to close as crowding surged. Towns, police forces, public works departments, and park staff were overwhelmed.

Restaurants pivoted to pickup and delivery services to mitigate limits on indoor dining. However, manufacturers and destination retailers of outdoor recreation hard goods experienced an unprecedented level of demand.

The Bucks County Herald confirmed this situation for the Lower Delaware River region in an <u>article dated January 14, 2021.</u> "Across the <u>Delaware & Lehigh Trail</u>, trail counters recorded an average monthly increase of 88% compared to the previous year," and "trail counters along the Delaware & Lehigh Trail recorded monthly percent increases as high as one hundred sixty-six percent this year."

² Partnership Wild and Scenic Rivers, https://www.nps.gov/orgs/1912/partnership-wild-and-scenic-rivers.htm.



Lower Delaware Wild and Scenic River Study

The <u>Lower Delaware Wild & Scenic River Study</u> was developed to support <u>federal designation</u>³. Also referred to as the Management Plan, this Study included discussions of all protected values and implementation strategies for each.

"Recreation" is listed as a river resource that should be encouraged. Its environmental impact is low, and its social impact is positive. Recreation is compatible with promoting public safety, protecting private property, and preserving the natural and cultural qualities of the corridor⁴.

Policies for recreation management included establishing public recreational river access and support facilities in the corridor; establishing "strict" rules and enforcement of same regarding extreme activities; and promoting public access points with guides, signs, etc.

Implementation strategies included:

- Review suitable access sites;
- Analyze access needs with officials;
- Have Pennsylvania and New Jersey work together to provide necessary enforcement and work with retailers and wholesalers to encourage best practices;
- Adopt compatible rules for recreation by both Pennsylvania and New Jersey;
- Include training with watercraft licensure;
- Develop a comprehensive interpretation plan that is compatible with the Delaware and Lehigh National Heritage Corridor.
- Conduct a Lower Delaware Region Workshop for residents and businesses impacted by watercraft use⁵.

The <u>Lower Delaware Wild and Scenic River Study</u> serves as the Lower Delaware Wild and Scenic River Management Plan. It remains the primary reference for policy, administrative and program guidance until the Plan is updated. Most policies stand today and are referenced in the <u>2007-2011 Action Plan</u> as described on the next page.

³ US Senate Bill 1296, 106th Congress, 1st Session, June 28, 1999.

⁴ Lower Delaware Wild and Scenic Management Plan (1997), 49-50.

⁵ Ibid.



Lower Delaware Wild and Scenic River 2007-2011 Action Plan - Items to be Completed

For this study's purposes, it is essential to review the accomplishments of the Lower Delaware Wild and Scenic River Management Council. The <u>June 2021 Lower Delaware Wild and Scenic River Recreational Assessment Interim Report</u> addressed the recreation-related goals of the <u>2007-2011 Action Plan</u> as the starting point for review of the current recreational environment on the Lower Delaware Wild and Scenic River. Assisting the study are the Lower Delaware Wild & Scenic River resource maps:

- <u>Designation Map</u> Includes non-supportive jurisdictions
- National Park Service Map
- Outreach Map Includes non-supportive jurisdictions
- <u>Google Earth Access Sites</u> Developed for this report (download the <u>Google Earth</u> app to view)

2007-2011 Action Plan Lower Delaware Wild and Scenic River

The 2007-2011 Action Plan goals and priority actions for Recreation, as well as five other particular values for which the Lower Delaware Wild and Scenic River is protected and managed according to the Lower Delaware Wild and Scenic River Management Plan: Water Quality, Natural Resources, Historic Resources, Economic Development, and Open Space Preservation. The 2007-2011 Action Plan's recreation-related objective was unchanged from the Lower Delaware Wild & Scenic Management Plan. It was to "encourage recreational use of the river corridor that has a low environmental and social impact and is compatible with public safety, the protection of private property and with the preservation of natural and cultural qualities of the river corridor."

The following identifies recommendations that have not yet been completed.

Access to the River

The Lower Delaware Wild and Scenic River Management Council should revisit these items:

• Increase public recreational river access and support facilities. *Access has been improved at the Giving Pond, the Riegelsville Boat Launch, and in Kingwood, and additional opportunities should be considered.*

⁶ Lower Delaware Wild and Scenic River Action Plan 2007-2011, Goal 4: Recreation.

- Establish and enforce commercial operators' use of public access sites for access, parking, and operations.
- Implement or explore recommendations in the Delaware River Water Trail Plan (See Attachment I for additional information or the entire <u>Delaware River Water Trail Plan</u>):

Water Trail Plan - Access

 Conduct a gap analysis to determine locations and needs for additional access points. These should include the Portland Reliant Energy Power Plant site and locations within Delaware Canal State Park.

Water Trail Plan - Amenities

- Explore island camping opportunities.
- Consider shuttles to outfitters offered by lodging establishments a service to lodging guests, as well as a means to reduce parking congestion.

Water Trail Plan - Safety

- o Increase the frequency of volunteer safety patrols.
- o Increase availability of paddling instruction programs.
- Work with emergency personnel along each river section and large management unit to receive feedback and input on access locations, GPS points, and numbering at both the river access launch/retrieval area and trailhead.
- Use the same radio frequency that provides safety information and warns of hazardous river conditions.
- o Consider information kiosks recommending a skill level for the river section.
- Investigate the potential for using solar-powered call boxes at river access sites so the 911 dispatch can receive information with a Global Positioning System (GPS) unit.

Water Trail Plan - Signage and Wayfinding

- Use the <u>D & L National Heritage Corridor sign system</u> to post Delaware River Water Trail signs at central access locations (signs are stored).
- Mark access points where appropriate.
- Work with Pennsylvania Department of Transportation, New Jersey Department of Transportation, New York Department of Transportation, and the Delaware River Joint Toll Bridge Commission (I-80 and south) to place identification signage on bridge crossings.
- Work with state departments of tourism/transportation regarding access signage.
- o Consider offering basic access and safety information in Spanish as well as English.
- Where public agencies require their designs or color schemes, develop designs incorporating features common to the agency and the Water Trail.
- Develop a handbook that acknowledges public agencies' need to use their design standards and offers guidelines for location, installation, and maintenance.

Water Trail Plan - Public Outreach / Courtesy and Stewardship

- Distribute information about the Delaware River Water Trail, significant natural and cultural resources, safety, access, and other aspects of the river annually.
- o Establish a widely understood and practiced "Leave No Trace (LNT)" program.
- Develop or sponsor educational programs and workshops on water safety and river stewardship.
- Participate in the annual Delaware River Sojourn (suggested explicitly for the Lower Delaware River Management Council).

Water Trail Plan - Website Development - www.delawareriverwatertrail.org

 Obtain permission of private access site owners, liveries, and campgrounds to include information on the website.

Safety

Several recommendations in the <u>2007-2011 Action Plan</u> remain unaddressed:

- Adopt and enforce bistate rules governing recreational use of the river corridor according to the recreational goals of the Management Plan.
- Work together to establish sufficient capacity to monitor activity and enforce rules governing excessive noise and intrusive activities in the river corridor, particularly during peak periods of use.
- Work with personal watercraft retailers and manufacturers to encourage safe and courteous use of watercraft.
- Establish and enforce concessioner compliance with health and safety regulations in the use of watercraft, as well as food and beverage sales.
- Enforce 'no wake' zones.
- Designate areas for personal watercraft use.

Interpretation

Develop a comprehensive interpretation plan for the entire Lower Delaware River corridor compatible with the Delaware and Lehigh Navigation Canal National Heritage Corridor Plan. The project should encourage the protection of resources, promote safe and courteous river use, and raise awareness of the value of the river resources.



Delaware River Water Quality

Given the perceived impact of high recreational use on water quality, addressing the stewardship of the <u>2007-2011 Lower Delaware Wild and Scenic River Action Plan</u> to "maintain existing water quality in the Delaware River and its tributaries from measurable degradation and improve it where practical" deserves consideration in this river recreation-based planning effort.

Lower Delaware River water quality is managed by the <u>Delaware River Basin Commission</u>, led by four basin state governors and a federal representative. The signing of the <u>Delaware River Basin Compact</u> marked the first time since the nation's birth that the federal government and a group of states joined together as equal partners in a river basin planning, development, and regulatory agency.

The Delaware River Basin Compact ensures (1) an adequate and sustainable water supply and (2) clean and healthy water resources. Significant programs include Water Quality, Water Supply Planning and Water Conservation Initiatives, Project Review/Permitting (Regulatory Review), and Flow Management/Hydrology (including Drought Management and Flood Loss Reduction).

DRBC has contributed to the <u>State of the Delaware River Basin and Estuary</u> in 2008 and 2013 and conducts a monitoring program specific to the Lower Delaware Wild and Scenic River. Given the long history and requirement to adhere to the Compact, the Commission could be approached to identify the effect of recreation on water quality.

Grassroots water quality programs exist to establish baseline water quality conditions and goals for its improvement. Well-established programs exist for the nearby <u>Raritan River Watershed</u> and <u>Musconetcong Wild and Scenic River</u>.

The <u>Delaware River Basin Commission</u> takes the lead on water quality matters about the Delaware River Basin, including the Lower Delaware Wild and Scenic River.



Steps for Developing User Capacity



User capacity is a subset of the larger <u>visitor use management framework</u>. User capacity is an estimate and not always a definitive number. The amount of investment devoted to determining user capacity must be commensurate with the consequence of the potential decisions to be made about managing visitor use.

Development of user capacity for a Wild and Scenic River has been described by the Interagency Wild and Scenic Rivers Coordinating Council in the white paper titled "Steps to Address User Capacities for Wild and Scenic Rivers." The nine steps to take when establishing user capacities are found on this page, followed by an analysis specific to the Lower Delaware Wild and Scenic River. See an abbreviated, descriptive elaboration of the steps in Attachment II.

The fundamental questions for the Lower Delaware River Wild and Scenic River to consider are related to the framework for establishing any system that measures, monitors, and controls the movement of people through its network of public access points.

"Visitor use" is the human presence within a wild and scenic river corridor for recreational purposes, including educational, interpretation, inspiration, physical and mental health. Visitor use includes commercial outfitters, guides, and other concessioners.

Visitor use and wild and scenic river-related management are addressed by setting user capacities for wild and scenic river corridors. See www.rivers.gov and https://visitorusemanagement.nps.gov for further guidance and materials produced by the Interagency Wild and Scenic Rivers Coordinating Council and Interagency Visitor Use Management Council, respectively. Here are the basic steps for developing user capacities:

- 1. Describe the baseline and current conditions.
- 2. Identify desired conditions for river values and classifications.
- 3. Identify the kinds of use that the wild and scenic river corridor can accommodate.
- 4. Identify measurable indicators for the desired conditions.
- 5. Establish thresholds for each indicator.
- 6. Identify triggers that elicit management response.
- 7. Identify management actions to take when triggers are reached.
- 8. Determine the wild and scenic river corridors' user capacities.
- 9. Establish monitoring and adaptive management approach.

Steps will be addressed here to examine the development of desired conditions for the Lower Delaware Wild and Scenic River and are explained more fully in Attachment II.

1. Describe the baseline and current conditions.

The baseline "conditions" of the river from a recreational perspective include an identification of boating access sites located in multiple jurisdictions whose size and management authority vary. Discussion with stakeholders through an online survey, follow-up interviews, and a town hall meeting provided additional input to assessing current conditions.

Lower Delaware Wild and Scenic Rivers Launch Sites

To prepare for a discussion about an "ideal" or "acceptable" level of river use among the many jurisdictions in the Lower Delaware River corridor, it is essential to understand how it is used today. To do this, we should be familiar with the network of public launch sites where boaters "put in" and "take out" from the standpoint of their management.

Select attributes from thirty public launch sites documented in <u>Table 1- Lower Delaware Wild</u> <u>and Scenic River Launch Sites</u> are found on pages 10-12. This data identifies whether fees or permits are required to access the river and the agency responsible for administering and enforcing them. Agency staff may provide law enforcement as well. Also noted are agencies whose responsibilities may include extending public service announcements, posting interpretive or advisory signage, and staffing launch sites to answer questions and monitor use.

<u>Table I</u> is a resource for parking area capacity, the types of craft allowed to launch at that particular location, their geospatial location, the presence of bathroom facilities, and contact information. The information was obtained from September 2020 to May 2021 from the following sources:

- The <u>Delaware River Water Trail</u> map,
- The <u>Delaware River Boat Access Sites</u> developed by the New Jersey Department of Environmental Protection and Division of Fish and Wildlife,
- *Canoeing the Delaware River* (Letcher, 1997, pp. 120-194)⁷,
- Recreational users, and
- The State of Pennsylvania, State of New Jersey, Delaware River Joint Toll Bridge Commission, County, and township administrative staff.

The table on the next page is a portion of <u>Table I</u>. This 'excerpt' identifies the Lower Delaware Wild and Scenic River launch sites and their respective fees, regulations, and law enforcement entities. According to their location, the sites are listed as the river flows north to south from the Borough of Portland, Pennsylvania to Yardley, Pennsylvania.

⁷ Gary Letcher, *Canoeing the Delaware River*, rev. ed. (1997, Rutgers University Press), 120-194.

Lower Delaware Wild and Scenic River Launch Sites (from <u>Table 1</u>) River Access Responsibility

Name	River Access Responsibility	\$ Fee and Terms	Social rule enforcement, interpretative responsibility	Parking Enforcement
Portland Footbridge Access	Multiple/None Northampton County Portland Waterfront Park, the river is accessed at the bridge	No fee	(LNT) None in place to enforce Borough of Portland Police	Borough, maybe the State of PA
Ramsayburg Historic Farmstead	Township of Knowlton leases from NJ Green Acres, leased State property	No fee	Township of Knowlton	N/A
Belvidere	NJ Dept of Fish and Wildlife	No fee	NJ Department of Fish and Wildlife	Belvidere Police, NJ Dept. Fish and Wildlife, NJ State Police
Martin's Creek Launch	PPL Martin's Creek, below Talen plant	No fee	State of PA	State of PA
Sandt's Eddy - PA Fish and Boat Access	PA Fish and Boat	Boat permit required	PA Fish and Boat	State of PA
Frost Hollow Overlook	Forks Township Northampton County owns property Access, only steps	No fee	Township Police	
Phillipsburg Boat Ramp	City of Phillipsburg, NJ	No fee	City of Phillipsburg Police Department	City of Phillipsburg Police Dept.
Scott Park, City of Easton	City of Easton	Metered parking	Parks and Recreation Department, Easton Police	Easton Parking Enforcement Dept.
Delaware Canal State Park, Old Canal Park	Delaware Canal State Park – Northampton County Permit	Boat permit required	Delaware Canal State Park law enforcement in park boundaries. Seasonal, State Park Ralph Stover State Park. Locals may respond.	611 to Rte. 32 s of Riegelsville / River Rd. PA State Police
Wy-Hit-Tuk County Park	Northampton County	No fee	There is access to the canal, though slopes are steep	PA State Police

Lower Delaware Wild and Scenic River Launch Sites (from <u>Table 1</u>) River Access Responsibility (Continued)

Name	River Access	\$ Fee and Terms	Social rule	Parking
	Responsibility		enforcement,	Enforcement
			interpretative responsibility (LNT)	
Theodore	Delaware Canal	Boat permit	State Park with	No issues - no
Roosevelt	State Park - NH	required	backup from State	shoulder
Recreation Area	County		or Easton City	
Lock 22/23			Police	
Fry's Run County	Northampton	No fee	PA State Police	PA State Police
Park	County			
Riegelsville	NJ Department of	No fee	NJ Department of	NJ State Police
(Holland Church)	Fish and Wildlife		Fish and Wildlife	
Access, NJ				
Riegelsville,	PA Fish and Boat	Boat permit	PA Fish and Boat	PA State Police
PA/Durham		required		
Furnace Canal, PA				
Fish and Boat				
Durham	PA DCNR - D&L	Boat permit	PA DCNR - D&L	PA State Police
Furnace/Lock 21	Canal State Park	required	Canal State Park	
DCNR Access				
Lynn Island/Lock	PA DCNR - D&L	Boat permit	PA DCNR - D&L	PA State Police
20 DCNR 'Canal'	Canal State Park	required	Canal State Park	
Access/				
Narrowsville				
Upper Black Eddy,	PA Fish and Boat	Boat permit	PA Fish and Boat	PA Fish and Boat
PA Fish and Boat		required		
Access				
Giving Pond DCNR	Delaware Canal	Boat permit	PA DCNR - D&L	No shoulder -
Access	State Park	required	Canal State Park	tickets are given
				on connection road
Frenchtown DEP	D&R Canal State	No fee	NJ Department of	Frenchtown Police
Access	Park		Environmental	
			Protection	
Kingwood Boat	D&R Canal State	D&R Canal State	D&R Canal State	NJ Department of
Launch: D&R Canal	Park	Park Memorial Day	Park	Environmental
State Park		-Labor Day, NJDFW		Protection, NJ State
		Maintenance fee		Police
		\$15/year		
Tinicum County	Bucks County	No Fee	Bucks County	Bucks County
Park			Parks & Rec - PA	
			State Police	

Lower Delaware Wild and Scenic River Launch Sites (from <u>Table 1</u>) River Access Responsibility (Continued)

Name	River Access	\$ Fee and	Social rule	Parking
	Responsibility	Terms	enforcement, interpretative responsibility (LNT)	Enforcement
Fairview Access	D&R Canal State Park	None	D&R Canal State Park	NJ Department of Environmental Protection, NJ State Police
Byram Boat Launch: D&R Canal State Park	D&R Canal State Park	\$60/80 Memorial- Labor Day or \$12/20 Boat Ramp Maint. Permit \$15/year	D&R Canal State Park	NJ Department of Environmental Protection, NJ State Police
Bulls Island Recreation Area Boat Launch	D&R Canal State Park	\$60/80 Memorial Day - Labor Day or \$12/20	D&R Canal State Park	NJ Department of Environmental Protection, NJ State Police
Virginia Forrest	Delaware Canal State Park	Boat permit required	Delaware Canal State Park	PA DCNR
Lambertville Boat Launch	D&R Canal State Park - Boat club lease	\$0	State of NJ DEP and D&R Canal State Park	NJ DEP, Lambertville Police
Fireman's Eddy	D&R Canal State Park	\$60/80 Memorial Day - Labor Day or \$12/20	NJ Department of Environmental Protection	NJ Department of Environmental Protection, West Amwell Police Department
Scudders Falls	D&R Canal State Park	No fee	State of NJ Park Police, Ewing Township Police	NJ Department of Environmental Protection, Mercer County
Washington Crossing	Washington Crossing State Park	Boat permit required	PA State Park Policy	PA State Park Policy/ State Police
Yardley Access	PA Fish and Boat	Boat permit required	Morrisville Borough Police/ PA State Police	Morrisville Borough Police/ PA State Police

2. Identify desired conditions for river values and classifications.

The desired conditions have not been set for the Lower Delaware Wild and Scenic River. Once established, these are the resource conditions, visitor experiences, opportunities, and facilities and services whose sustainability should protect and enhance river values in the Lower Delaware Wild and Scenic River Management Plan. The process for developing desired conditions should include the following:

Determination of Corridor Capacity. Complete the 2007-2011 Action Plan review of current access sites and their capacity. Identify potential opportunities for existing site improvement and expansion, as well as new site conversion or acquisition, considering that access expansion may impact other protected river values.

Consider public input received in the online survey, follow-up interviews, and town hall event to assist in evaluating and prioritizing access enhancement needs, including a program of use reallocation.

Review of Fees and Permits in the Corridor. Seek a fee and permit system comparable across counties in both Pennsylvania and New Jersey, and share how these funds are distributed with the public.

On-water Rule Enforcement. Re-establish a presence to dissuade excess noise, wake height, speeding, and proximity to other boaters and landowners. Work with agencies responsible for on-water enforcement and consider bistate patrols viewing current Pennsylvania-New Jersey rescue squad cooperation in certain jurisdictions as models.

Establishment of Leave No Trace (LNT) principles. Develop a suite of messages to teach key principles of Leave No Trace outdoor ethics to adults and children before, during, and after visiting the river. Consider the expertise of Leave No Trace traveling teams from time to time. Plan a basin-wide initiative with fun events that reinforce LNT principles.

Reviewing and addressing deliverables in previous plans, together with public input received, will provide the basis for desired conditions and a planning process to be developed. These are listed briefly below and are explained in more depth in Attachment II.

- 3. Identify the kinds of use that the WSR corridor can accommodate. This step connects public uses to the facilities that support them in the corridor.
- 4. Identify measurable indicators for the desired conditions.

This step identifies indicators to measure conditions in the river corridor and is another important aspect of linking user capacities to desired conditions.

5. Establish thresholds for each indicator.

Setting threshold conditions can help protect river values and develop capacities for the river corridor. Setting thresholds that can be controlled once exceeded is an important exercise, even if the thresholds are unrealistic.

6. Identify triggers that elicit management response.

A trigger is a predetermined point at which changes in an indicator prompt a management response to ensure the threshold for that condition is not crossed.

7. Identify management actions to take when triggers are reached.

This step identifies specific actions prompted if triggers are reached.

8. Determine the Wild and Scenic River corridor user capacities.

Set the amount of use that can take place without crossing thresholds for indicator conditions that would degrade river values.

9. Establish monitoring and adaptive management approach.

A monitoring program helps ensure that the quantity and mixture of use do not adversely affect river values.

Performing Visitor Counts at River Access Sites

Recreationists enter and exit the Lower Delaware Wild and Scenic River from one of thirty locations and travel varying distances in the sixty-seven-mile-long corridor. Counts of vehicular traffic, parking spaces, boaters, and other recreationists at launch sites should be compared both where crowds are most pronounced and at places that offer opportunities to distribute recreational use. Should a headcount be of interest to estimate levels of crowding at one access point or multiple points, consider the following process:

- Identify the access launch sites at which traffic is to be measured. Review <u>Table I</u> to confirm the parking capacity at each location. Determine if the volume of people putting in and taking out seems to meet or exceed either the launch site or parking area.
- A combination of manual counting and applying density estimates may establish a
 projected count for a moving crowd. Counts will be most accurate where people are
 going in one direction. Personnel should locate at a vantage point from which it is easy to
 view the crowd.

Documentation can be on paper forms, tablets, or phones combined with a paper or alternate digital backup.

Public Survey of Lower Delaware Wild and Scenic River Recreational Use – Fall 2020



The initial objective was to develop a profile of users for a representative sample of nine access sites in the corridor. A questionnaire was developed and shared through the Lower Delaware Wild and Scenic River website and Facebook page and in the Lower Delaware Wild and Scenic River Management Council newsletters to understand the public's perspective about Lower Delaware River recreation. Lower Delaware Wild and Scenic River partners were emailed and asked to share the survey with their network, and the National Park Service distributed a press release. Two hundred thirty-nine stakeholders responded to the survey from October 16, 2020, through December 18, 2020. Survey questions are included in Attachment III.

We connected with representatives from the most important stakeholder groups to achieve sufficient diversity among our respondents.

As survey responses were submitted, it became evident that additional launch points should be considered. Four launches were added to the questionnaire for a total of thirteen. A total of thirty were reviewed, referenced on <u>Table I</u> and in the <u>Google Earth Access Sites</u> (download the Google Earth app to view) to include access sites along the Lower Delaware Wild and Scenic River located in jurisdictions that are not included in the designation.

The following percentages reflect the access points that survey respondents indicated was their "Primary Access Location" for the Lower Delaware Wild and Scenic River.



Right: Frost Hollow Overlook, managed by Northampton (Pennsylvania) County Parks

2020 Lower Delaware Wild and Scenic River Use Questionnaire "Primary Access Location" of Respondents

18%
14%
8%
8%
8%
6%
3%
3%
3%
2%
2%
1%
1%
1%
1%
1%
1%

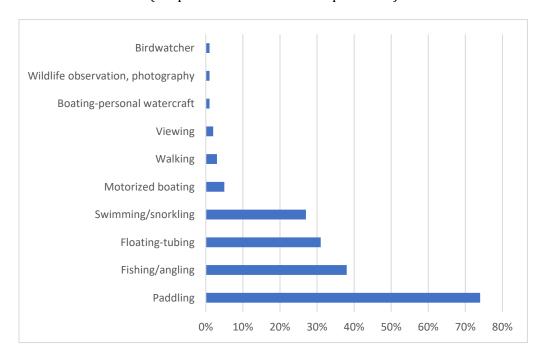
To ensure feedback included representation from businesses and agency representatives, several individuals were contacted directly. As a result, the survey and follow up interview included discussions with the following stakeholders:

- Lower Delaware Wild and Scenic River Management Council;
- Agency Staff representing Northampton County, Pennsylvania Fish & Boat Commission,
 Delaware Canal State Park, Delaware and Raritan State Park/New Jersey Department of
 Environmental Protection, Delaware River Joint Toll Bridge Commission, and Delaware
 River Basin Commission;
- Township officials from Portland, Knowlton Township / Columbia, Upper Mt. Bethel, Belvidere, Lower Mt. Bethel, Easton, Phillipsburg, Pohatcong, Bridgeton, Stockton, Milford, and Frenchtown;
- One hundred thirty-two Residents, twenty Landowners, and eleven Business owners;
- One hundred seventy-nine self-described river users, including at least one person for each public access point; those using private launches; and individuals who access the river downstream of the protected reach.

Recreationists shared the nature of their preferred type of river use as follows:

2020 Lower Delaware Wild and Scenic River Use Questionnaire Use(s) With Which You are Most Familiar

(Respondents could choose up to three)



Nearly three-quarters (74%) of respondents indicated that they paddle, and roughly a third stated they swim or snorkel (27%), float-tube (31%), or fish (38%).

Contributor to Lower Delaware Wild and Scenic River Over-Utilization

Asked to describe the recreational use on the Lower Delaware Wild and Scenic River, nearly one-third (32%) of respondents indicated that it is "over-utilized" and "in need of dramatic management improvement." Almost the same percentage (31%) indicated use is "appropriate," and roughly one-quarter (24%) thought it is "over-utilized but manageable." Five percent (5%) indicated the river is "underutilized."

When asked survey participants to choose factors that contribute to the increased popularity of river recreation, fifty-seven percent (57%) cited "river tubing." Forty percent (40%) of the fifty -seven percent (57%) indicated the growth is from "people using personal inner tubes," and seventeen percent (17%) believed commercial outfitters are generating the growth.

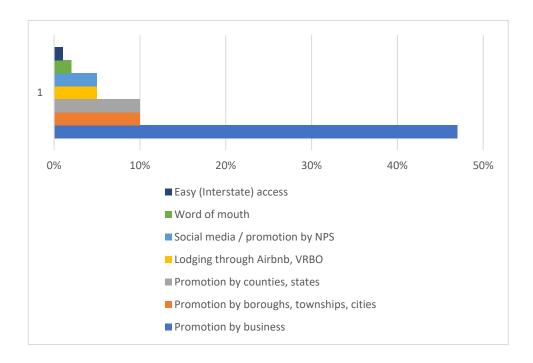
Other types of users that have contributed to the increase in river recreation, according to respondents, are paddlers with their personal boats – eleven percent (11%), people renting kayaks, canoes, rafts – six percent (6%), and anglers – six percent (6%).

Respondents suggested other reasons for growth include marketing fielded by local businesses, the National Park Service, local jurisdictions, and lodging services such as Airbnb and VRBO.

See Exhibit IV for examples of a sampling of online messaging fielded by the Greater Lambertville Chamber of Commerce, individual jurisdictions, and businesses.

Despite the complement economic development and recreation provide to one another, survey participation from the business community was disappointing. However, direct contact with outfitters resulted in discussions with three river-based businesses. After presenting the river recreation study to over twelve business owners during a meeting of the Greater Lambertville Chamber of Commerce, no new survey responses were received from individuals who self-identified as Lambertville-based business owners. Separately, a representative of Stockton Borough, New Jersey indicated in a survey follow-up interview that there is little retailer interest in promoting their services to river visitors.

2020 Lower Delaware Wild and Scenic River Use Questionnaire Other Reasons for Popularity

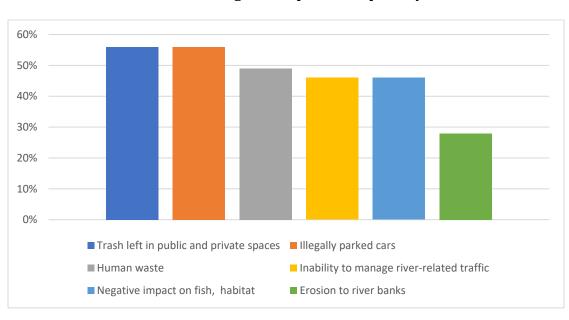


Perceived Impacts of the River's Popularity

Survey respondents believed there are positive outcomes associated with the growth of river recreation. Sixty-three percent (63%) believed the experience of being on or around the river had increased user awareness of the need to protect river values. One-third (33%) cited tourism dollars as a positive consequence, and twenty-five percent (25%) believed river recreation-based awareness has grown or strengthened volunteerism.

On the other side of this popularity, survey respondents indicated several negative impacts of the river's growing popularity. Roughly fifty percent (50%) cited trash, illegally parked cars,

and human waste, and forty-six percent (46%) believed recreation has negatively impacted fish and habitat. An inability of jurisdictions to manage river-related traffic was mentioned by forty-six percent (46%).



2020 Lower Delaware Wild and Scenic River Use Questionnaire
Negative Impacts of Popularity

Management Strategies and Tactics Suggested by Survey Respondents

There was a high level of interest expressed for representation by recreational users and businesses on the Management Council. Thirty-seven percent (37%) of survey respondents favored asking recreation and business communities representatives to help develop a balancing plan or process. Over a quarter (26%) suggested that such representatives serve on the Lower Delaware Wild and Scenic River Management Council, and nearly the same suggested the Council develop a new management plan for which these representatives are essential contributors. Ten percent (10%) indicated the business and recreation representatives should serve on the Council.

The <u>Lower Delaware Wild & Scenic River Study</u> was developed to support federal protection. This Study included discussions of all protected values and implementation strategies for each.

This survey, interview, and town hall discussions focus on the Wild and Scenic section of the mainstem Lower Delaware River. Tributaries included in the protected Wild and Scenic Rivers Act, Tohickon, Tinicum, and Paunacussing Creeks, were not included in the survey as the impact of recreation on their use has not been expressed as a corridor priority. These creeks are referenced in Attachment V.

One-on-One Interviews: Lower Delaware Wild and Scenic River Stakeholders



One-on-one interviews were conducted to obtain input from individuals who indicated in the questionnaire that they would like to discuss the topic of Lower Delaware Wild and Scenic River recreation further. Forty-seven interviews took place from October 2020 to January 2021.

Many interviewees reinforced the data they and others had already provided via the online survey. Notable respondent comments are below, and expanded versions of interviews with the individuals referenced below are included in Attachment VI.

Lower Delaware Stakeholder Suggestions

River Users

"Outfitters have introduced many people to the river. I'm seeing a lot of people show up with their inner tubes, not just using liveries to get on the river." (Lower Mt. Bethel resident, boater on upper sections of Lower Delaware)

"The more people that we can get to experience the river, the greater the number of people that will fight for its quality. When my son and I were going to SCUBA dive at the Water Gap, our favorite spot was closed, we came down to Riegelsville. I've been hoping to do that for years, and my son just got certified this year. It was neat that we were able to do that together. I participated in cleanups while I was a scout as a boy. As a Hackensack River Canoe and Kayak Club member and Mohawk Canoe Club member, I have participated in two cleanups on the Musconetcong, where they provide bags and pickups. Since more people are going out, let's put more on everyone: let's each pick a section of the river to collect trash, and let's ask businesses to help. It is frustrating to find access points posted to be used only by residents like in Columbia, just south of Portland. " (Former resident of Belvidere and a boater who paddles Portland to Bull's Island)

"The National Wildlife Foundation has managed to bring various constituencies like hunters, birders, and preservationists into its fold. If you got business owners and the Delaware and

Lehigh Canal Society (which I'm a member of), bicycling clubs, kayaking clubs, and rowing clubs, you could start getting people to work towards the common good. It would be an amazing thing to start with what people can agree on. "(Lambertville resident)

"Are jet skis appropriate to even be allowed to be put in at the Kingwood launch? I don't mean to sound Draconian, but when you're weighing public good, is this the right place for a jet ski? And I'm not sure that it is. Are there permits required and should jet skis even be (allowed) on them?" (Kingwood resident)

"My goal is to paddle the whole length of the Delaware River in my packraft. I have been to the Lower Delaware as far as 20 miles below Trenton. I often put in at Smithfield Beach and park in Portland on 611, mainly on weekdays so I can find parking." (Resident of upstate New York)

"My friend owns a small powerboat and puts in at Bull's Island in Kingwood. I canoe paddle from Hancock, New York through Foul Rift to Wells Falls. It's usually not crowded on weekdays, and in 2019 it was only crowded on weekends." (Kingwood resident and boater)

"I'm a big believer in Leave No Trace ideas. I think some people just aren't aware of what it means to Leave No Trace. And I think that would be a good way to go, especially on the islands, where people take breaks. Five-to-six years ago, we went up to Bulls Island to put in. Somebody from the State of New Jersey Parks Department said, "Sir you need a launch permit to launch at Bulls Island." And I said, "Oh, you know I have a launch permit for Pennsylvania." And they were like, "No, no. For this access ramp, you need one." And I said," How much are they?" Because they're \$10 in Pennsylvania. So they said costs \$150 per craft. \$150? I paid \$300 for the kayak!" (Father and Son, boaters and residents of Frenchtown)

"Leave No Trace materials are posted, and trash bags are available. You'll see the sign that says 'Leave No Trace' and at the end of the day you see that wooden park sign with full, yellow bags and diapers just piled up next to it." (Scudder's Falls boater)

"Those who leave trash include whose who may not pay attention to signs and other messaging in English. Lambertville started to get crowded when people got moved from Scudders." (Lambertville boater)

"Jet skiers are doing lots of donuts and racing and playing with each other and getting very close to all other manner of craft. It just seems much more dangerous to me. The Coast Guard – or someone used to come out and patrol years ago. We haven't seen anybody for the last couple of summers, so there's no one to give even a reprimand." (*Upper Black Eddy resident, boater*)

"We need education programs and good signage." (Upper Black Eddy resident, boater)

"The free (river) resource is awesome for the underserved. Let's encourage more respect for the river, education, and promotion of pack-it-out practices. Let's also encourage Spanishspeaking State staff such as interpretive rangers and police." (Scudder's Falls boater)

"I have been at the Fairview launch in the summer at 6:00 p.m. or 7:00 p.m., an hour before sunset, which is a great time to fish. There are times I've gone there to see a whole bunch of vehicles there with NY license plates. I go down to my spot and see all of these people down there doing whatever. When I return thirty minutes later the cars are gone, but there remain empty cans, cases of Corona beer, bottles, whiskey bottles, gallons of empty whiskey bottles, diapers, clothes all over the place, graffiti spray-painted all over the trees. It's been very frustrating." (Kingwood resident, angler)

Residents

"I walk along the river pretty much every day. Due to the pandemic, everybody was looking for some place to be outside. It was great to see so many people enjoying the river and being outside." (Frenchtown resident, walker)

"Frenchtown River Ambassadors and <u>Sustainable Frenchtown</u> seek to offer a model for cultivating community and river stewardship among residents and visitors. A summer volunteer corps of Frenchtown River Ambassadors will locate at a central crossroads location on summer weekend days from June 26, 2021, to Labor Day, 2021 to "build community, outreach environmental stewardship, and promote local businesses." River Ambassadors will

- Welcome visitors and share information on parking, public restrooms, river safety and stewardship, local businesses, etc.
- Lead a "youth hour" with an environmental education session for children.
- Lead a "river clean-up hour" for visitors and community members.

The River Ambassadors program and its \$800 budget were approved by the Borough of Frenchtown and has been endorsed by Sustainable Frenchtown, Love Frenchtown, Frenchtown Vigil for Justice and Peace, and the Lenape Nation of Pennsylvania." (Frenchtown resident)

Agency Staff

"A request to the Delaware River Basin Commission needs to involve 50,000+ gallons of questionable water for the issue to be reviewed tested as a problem." (Delaware River Basin Commission staff)

"One of the requirements for my new staff person is that they had to be bilingual (English-Spanish), so it's a whole new realm for us to get into translating. I think a big part of the responsibility will be developing virtual programs and translating our educational materials over." (New Jersey State Park staff)

"I always kind of wonder if there are more opportunities if use is not so concentrated. People typically go from Kingwood down to Byram Boat Launch or Point Pleasant. This year, we saw a

tremendous increase in people all of a sudden putting in tubes at Bulls Island and then floating down to Lambertville because that's where commercial entities have operated. We could let people know they could go tubing from Fireman's Eddy down to Washington Crossing, as Washington Crossing State Park is an underutilized put-in. People picnic there like crazy, but it's a nice spot to put in or take out a boat." (New Jersey State Park staff)

"We'd like to figure out a best practice and protocol to accommodate folks. We have a capital improvement project going on at Wy-Hit-Tuk Park within spitting distance of the river, but you still have to go from the park to the canal, to the canal trail, and then the river. It has been a park since the early '80s with an organized campground, and we are going to open that up, working with the Delaware & Lehigh National Heritage Corridor. (Northampton County Staff)

Business Owners

"I run roughly thirty trips for eight weekends and I bet people must be spending money besides their reservations with us, nearby to purchase gas at the Citgo, a meal at the Bamboo House, and other items at Kathee's General Store. Anglers sometimes think tubing interferes with their fishing and others think tubing interferes with their serenity, but who's to say their serenity is more important than a family's fun adventure?" (Outfitter in Frenchtown)

"I work in land stewardship, so ecological integrity is a concern for me. I think of course it's valuable that people are using the river because when you fall in love with something, you're more compelled to protect it. So I think it's finding that connection between why are we attracted to these spaces ... then making the leap to okay, we can all recognize their beauty and value: can we then make the leap to protect and steward them?" (Kingwood business owner)

"Let's offer safety directions and interpretive signage. We should raise awareness of river preservation needs and share steps people can take to help out, and we should make sure there are enough State Troopers." (Stockton business owner)

Non-profit Organization Program Leaders

"We have a residential River-Friendly Program as well as a business, school, and golf course program as well. We work with almost any organization or entity that's interested in working with us. This specific program is focused on the Raritan Watershed at this time, but there is interest to expand to working on the Delaware River. We conduct about a dozen stream cleanups in different towns on two weekends right around Earth Day. We work with departments of public works to do the trash removal once volunteers collect it. Our staff shows up, gives away T-shirts, and provides water and snacks." (Non-profit program leader)

"All partners should have a unified message, and we should thank long-time users, particularly our neighbors, our residents." (Non-profit program leader)

Municipal Leaders

"Let's develop a new management plan to which representatives are important contributors." (Municipal leader, New Jersey)

"New Jersey has designated most of the tributaries that run into the Lower Delaware Wild and Scenic segment as C1 waterways, which is the highest protection affordable to those tributaries. There are several in Pennsylvania that should get the same status, but Pennsylvania doesn't have the same kind of system. So let's get a common acknowledgment of water quality designations with both States." (Municipal leader, New Jersey)

"We get the engines and people blaring music on their boats. There's another pretty new phenomenon that's a real concern for landowners: wake surfing boats. Those waves are quite pronounced, and when those waves hit the river banks, it's not in a natural way a wave would naturally come down, so we're seeing a lot of erosion beyond the erosion we're seeing along the riverbank anyway.

"Sometimes boats and jet skis move very quickly. The river's not very wide here, so with a lot of boat traffic and moving at a lot of different speeds – there's an accident waiting to happen.

"I think there needs to be a plan of how to manage the commercial end of use because it has spiraled out of control the last few years. It's not like you can put limits on them. Tubing seems to be the hook to get everybody out here, then people realize, "Oh I'm not going to pay \$75 to go down the river when I can do it for \$10." So that's why the private tubers have moved in, in such numbers." (Municipal leader, Pennsylvania)

"The businesses certainly welcome anyone who comes with money. There's one Stockton grocery store and the Stockton Market which attracts an awful lot of people. Most of the river people don't see the town merchants. I've never seen merchants at the river or very few: they're busy making a buck, so they don't feel the influence of the river traffic, and I don't think they feel a responsibility that that plastic bag you receive at the Stockton grocery store ends up in the river. A lot of picnickers are packing their stuff with them and I don't think that they're a big economic asset to the town. I'm sure there's some. They buy gas and probably stop at the grocery store or the liquor store to buy beer." (Municipal leader New Jersey)

"Let's conduct cleanups at regular intervals; develop a steward emissary program; erect signage at regular access points; and enforce licenses." (Municipal leader, Pennsylvania)

Lower Delaware Wild and Scenic River Town Hall Conversation



A Lower Delaware Wild and Scenic River Recreational virtual meeting was hosted on November 30, 2020, to discuss the Lower Delaware Wild and Scenic River recreation. The purpose of the town hall was to share the need for and nature of the study and seek participant suggestions for future planning efforts. Richard Dodds, Council Chair, and Maryann Carroll, Delaware River Greenway Partnership Executive Director, hosted eighty participants.

Participants were asked about the effectiveness of current regulatory controls: permits, fees, and closures. They were asked for suggestions for balancing recreational use and environmental concerns. The community wants people to enjoy the river and knows there is a need to protect water quality and the adjacent riparian zones.

Participants were asked to help everyone understand why people are coming and what they are doing when they arrive near and on the river. Participants learned that Partnership Wild and Scenic Rivers involve no federal land ownership.

A poll fielded during the town hall indicated the following as the most important recreation-related needs for the Lower Delaware Wild and Scenic River:

- Trash reduction and removal,
- Water pollution reduction motors and people, other sources,
- Streambank and habitat protection, and
- Safe, legal parking.

Suggestions were offered to address these, arranged below in four categories: access, education, engineering, regulation, and enforcement.

Access

- On the PA side, improve streambanks and develop more or better access points.
- Allow or encourage clubs or groups to maintain specific access points with signage naming of their group, such as "Friends of Scudders."

Education

- Conduct a public education campaign encouraging people to be responsible for their trash by bringing a trash bag for themselves and removing stray trash they find along their trek.
- Conduct river cleanups.

• Look at the river as a whole, not just one state or the other.

Engineering

- Implement streambank protection and restoration.
- Lambertville, which is popular with fishermen and others, could perhaps provide trash receptacles to make it easier to put trash in the proper place.

Regulation / Enforcement

- Prohibit all tubing.
- Limit launches for outfitters.
- Establish a recreational user carrying capacity.
- Levy fines.
- Establish entry limits based on river flood height.

Bistate Alignment

Comments underscored the need for coordination between Pennsylvania and New Jersey regarding rules, regulations, fees, and enforcement.

- "We can establish regulation on one side of the river, and the other side may have no regulation. Access points on one side may be developed, and land on the other side may be private, so their regulations are different. It's almost as if you have no regulation, because it varies depending on which side of the river you are on. You have to have both sides agreeing on some basic standards for conduct with people on the river, whether it be what you do with your trash and types of boating. Those things are only going to be worked out if they're worked out through a bistate approach."
- "I remember being up at the Water Gap one year where three states come together. When I asked a park ranger how he enforces the laws, he said the first thing to do is making sure the laws are the same for all three states. The most common is 'no wake'. Alcohol is always a problem, and noise is another."
- "We've gone years without anybody showing up. The New Jersey Police Marine Division could coordinate with the PA Fish and Boat people so one would patrol one week a month and the other another week per month to share the services and let everyone know someone will be out from time to time."

Education

Participants reinforced support for education that informs visitors to practice safe behavior and understand the safe range of water levels for their preferred activity.

- "Develop water level-related safety messaging and enforcement to reduce high water incidents for untrained users, notably tubers."
- "There's sensitivity to not wanting to target specific groups of people, including backlash to offering bilingual signage. More and more people are out with trash pickers and bags so we can feel more positive about where things might be heading."

• "The Tri-County Rescue Association has been planning a signage operation all along the lower part of the river from Riegelsville south to break the river into segments that are then color-coded. Signs are put up at all of the access points so that tubers entering the river can identify where they went in or the last sign that they saw. New Jersey State Parks, the Joint Bridge and Toll Commission, and county dispatch agencies have attended meetings where this has been discussed."

Enforcement

Law enforcement is valued. On-water enforcement is desired by those worried about motorized craft use: shore-based enforcement needs vary widely.

- "Encourage tube rental people to keep the river somewhat clean and somewhat orderly
 through their practices such as securing trash bags from blowing into the river and the
 behavior of their customers, or risk the greater community enforcing some sort of tax or
 penalty."
- Caution was offered to avoid establishing a law for all sections of the river since its characteristics such as depth or width vary considerably, and requirements might be unfair if levied on private landowners.

Trash

Several suggestions were offered as approaches to mitigate the effects of trash presence.

- Solebury hires a private firm for their trash pickup, but people would just come and dump their trash in parks next to small trash receptacles. They started a "trash in, trash out, take your own" as a defense. They posted signs and also put them on their website for the community and the various teams using municipal parks. They asked team (baseball, soccer, etc.) leaders to announce the trash program to their teams and the parents of the teams. The message to parents was that this was a tax problem too, for they pay others to take the trash and get rid of it, and it would be best if everyone handles their own. After about eight months, the township manager hasn't expressed that people are still dumping trash there, and the town accepts that it might be working 70 percent of the time.
- Some are in favor of more trash cans and enforcement.
- Others are in favor of personal responsibility and educational signs. A park supervisor
 offered that they do not put trash cans in the park and have a sign saying *Please be*respectful of our park, which has worked.
- "Signage might address language barrier issues, but there needs to be some form of education and thought given to kids leaving alcohol containers and cigar wrappers."
- Agency staff expressed appreciation for the great ideas.
- A suggestion was offered that tubing companies post people (separate from those who
 are unloading and loading rafts) at launches as 'health and safety liaison,' wearing
 something different and encouraging visitors to bring trash back home once they get off
 the river.

- New Jersey State Parks works with New Jersey State Park Police, and they also have seasonal summer staff police. They were able to hire visitor service assistants who were stationed on the weekends (along with the park superintendent) at Scudders Falls to help direct and give information to users. The New Jersey State Park Police are there to protect and preserve the New Jersey State Park system. They don't look like interpretive rangers because they do serve as law enforcement.
- Friends of the Delaware Canal offered that a cordial information provider and law enforcer serve different roles and are both important.
- Commercial tubing companies have no financial responsibility around garbage cleanup in their launch and pickup areas, but people have noticed they have a vested interest in making sure it's relatively clean on the river.
- "Tuber" issues have evolved: those who spend quite a bit of money the first time during a commercial operation find they can pick up four or five tubes for the same price and go out on their own.

Non-Partnership Wild and Scenic Municipalities

Several municipalities in the Lower Delaware Wild and Scenic River corridor are not yet designated, partners. Their respective river sections are not included in the planning and management of the protected river, and they were encouraged to re-consider participation.

- "Municipalities were available to be designated at a few points in time throughout the Wild and Scenic Designation process, and they are still eligible to be designated. When Congress initiates a Wild and Scenic Rivers it looks at resource values that may allow the river to qualify under the Wild and Scenic Rivers Act. Then, municipalities sign a resolution supporting the study: that's their first opportunity to get in the door. Once the study is released and Congress ultimately designated the river corridor under the Wild and Scenic Rivers Act, a management plan is adopted and a management council is established. At that point, a municipality can choose to participate in the management council by signing an MOU.
- "Some municipalities along the Lower Delaware Corridor have chosen not to support the designation through the study process or signing the MOU to be a member of the Lower Delaware Wild and Scenic River Management Council. They can still be added to the designation should they change their mind, and the Management Council has been actively working to continue outreach to those municipalities."
- "A municipality could sign the MOU, and then the MOU would then be brought to the Secretary of the Department of the Interior, who would decide to add that municipality to the designation. This is what has most frequently occurred most recently."

Water Quality

Concern that recreation impacts the environmental health of the Lower Delaware and participants is not (yet) supported by data.

- Suggestions included posting safety signage at dams and opposing the newly proposed H&K (Center Valley Materials) quarry in Springfield Township, PA, which is within the Upper Tohickon Watershed.
- One survey interviewee who manages water quality for the Delaware River Basin Commission was referenced. He'd suggested that the amount and the degradation of the water quality, on a really busy summer day, should be measured before we know the size of the problem, for they can take action. The audience was asked to consider a pilot messaging test, a special cleanup, or bilingual signage to address behavior that degrades water quality. "Those who could lend a hand from friends groups care the most and are the most knowledgeable about the river."
- "The Tri-County Marine Rescue Association, which represents fire companies performing river rescues along the river from Riegelsville to Yardley, meets quarterly and might be interested in helping out with a water quality monitoring effort."
- "Relationships with the Schuylkill River Greenway, Friends of the Delaware Canal, and the Bridgeton-Nockamixon-Tinicum Groundwater Committee have a very strong interest in maintaining our watershed throughout the three townships, are always concerned with pollution and would probably have someone who could be a contact."
- "Grants like those given to SPLASH could compare summertime coliform counts compared to the wintertime to just get an idea of what's happening on the river during certain times of the year."
- "Adventure Scientists has been doing volunteer solicited water quality testing on the Chattooga and other Wild and Scenic Rivers. Maybe a similar organization could be approached. There may be some other inexpensive ways of doing it."
- "The Penn State University Watershed Stewardship Program might be a resource in developing a water quality testing and monitoring program."

Right: <u>SPLASH Delaware River Floating Classroom</u> (based in Lambertville, New Jersey) students learn how human activities impact a river which is the source of drinking water for seventeen million people.



Photo courtesy of SPLASH Delaware River Floating Classroom

NATIONAL WILD AND SICKNIC RIVERS SYSTEM

Recommendations

Several strategies and actions are suggested for consideration by the Lower Delaware Wild and Scenic River Management Council. This report recommends an ad hoc Recreation Committee that reports to the Lower Delaware River Management Council. Their members include a representative from the State of Pennsylvania, a County, the State of New Jersey, the Interstate Toll Commission, a resident, and a business owner.

The role of the ad hoc committee would be to support the process involved with establishing Current Conditions and the development of Desired Conditions. The group would provide input and contribute to the development of desired use parameters for the Lower Delaware Wild and Scenic River, develop a 'capacity' or desired profile of visitor use, and develop a plan to monitor recreational use. The process for developing desired conditions should include the following:

I. Develop Desired Condition

Develop desired conditions for the Lower Delaware Wild and Scenic River, and proceed to develop a 'capacity' or desired profile of visitor use, as well as a sustainable plan to monitor recreational use.

a. Confirm Access Capacity Plans.

Complete the 2007-2011 Action Plan review of current access sites in the next section. Identify potential opportunities for existing site improvement and expansion, as well as new site conversion or acquisition, considering that access expansion may impact protected river values.

b. Identify the Current Profile of Use.

- o Identify attributes of use that can be measured. Factors can include parking spaces (a physical limit), the time taken to float the river.
- Develop a plan and implementation to affect the quantification of use during periods of high use (summer weekends and holidays) and low use (early spring and fall).
- o Consider non-native English-speaking visitors in messaging plans or protocols.
- Project the impact of recreation if no measures are taken and the steps to balance the effects of river recreation with increasing economic impacts.
- Consider physical counts and crowd-sourced photographs to assist estimates of use and crowding at priority locations, as determined by the Management Council.

c. Prioritize Site Enhancement Opportunities.

Utilize public input received in the online survey, town hall events, and one-on-one interviews to prioritize access enhancement needs.

d. Project a Desired Profile of Use.

- o Identify opportunities to communicate Leave No Trace and other best practices, and include opportunities to do so in more than one language wherever practical.
- Identify potential methods for controlling use. These could include the issuance of parking violations, physical barriers to prevent parking on roadside shoulders, or outfitter fees.
- Determine steps to implement controls, and consider municipal-county and bistate partnerships as alternatives for on-water law enforcement.
- Reach out to agencies and jurisdictions who have not been part of this project discussion, such as the US Coast Guide and New Jersey Marine Police.
- Based on information collected, identify the best guess projection of recreational use in the categories that can be measured and monitored for a 10-20 year period.
- o Identify resources necessary to implement considered actions.
- o Identify means for monitoring use. The measurements taken to assess current parking capacity and float time should be repeated periodically.
- Repeat a public survey periodically to assess public perception of the impact of recreation's popularity.

II. Complete the Implementation of the 2007-2011 Action Plan, Section 4: Recreation

Review initiatives and actions cited in this plan to complete them as identified below. If the meaningfulness of an initiative has waned, sunset the priority for its completion. Here is a review of the outstanding deliverables:

Access to the River

The 2007-2011 Action Plan sought additional river recreation access capacity and support facilities mentioned in the original management plan. Also continued was the priority to "establish and enforce commercial operators' use of public access sites for access, parking, and operations8."

Implement recommendations in the Delaware River Water Trail Plan (See Attachment I for additional information or this link to review the <u>Action Plan</u> in its entirety):

<u>Water Trail Plan - Access</u>Conduct a gap analysis to determine locations and needs for additional access points. These should include the Portland Reliant Energy Power Plant site and locations within Delaware Canal State Park.

⁸ Ibid.

Water Trail Plan - Amenities

- Explore island camping opportunities.
- Consider shuttles to outfitters offered by lodging establishments a service to lodging guests, as well as a means to reduce parking congestion.

Water Trail Plan - Safety

- Increase the frequency of volunteer safety patrols.
- Increase availability of paddling instruction programs.
- Work with emergency personnel along each river section and large management unit (such as NPS) to receive feedback and input on access locations, GPS points, and numbering at both the river access launch/retrieval area and trailhead.
- Use a shared radio frequency that provides safety information and warns of hazardous river conditions.
- Consider information kiosks recommending a skill level for the river section.
- Investigate the solar-powered call boxes at river access sites so that a 911 dispatch receives calls with a Global Positioning System (GPS) unit.

Water Trail Plan - Signage and Wayfinding

- Post Delaware River Water Trail signs designed using the <u>D & L National Heritage</u>
 <u>Corridor sign system</u> at central access locations (they are in storage and available to be installed).
- Mark access points where appropriate.
- Work with Pennsylvania Department of Transportation, New Jersey Department of Transportation, New York Department of Transportation, and the Delaware River Joint Toll Bridge Commission (I-80 and south) to place river orientation signage on bridge crossings.
- Work with state departments of tourism/transportation regarding access signage.
- Consider offering primary access and safety information in Spanish as well as English.
- Where public agencies require their designs or color schemes, develop designs that incorporate features common to the agency and the Water Trail.
- Develop a handbook that acknowledges public agencies' need to use their design standards and offers guidelines for location, installation, and maintenance.

Water Trail Plan - Public Outreach / Courtesy and Stewardship

- Distribute information about the Delaware River Water Trail, significant natural and cultural resources, safety, access, and other aspects of the river annually.
- Establish a Leave No Trace (LNT) program that "informs, educates, and repeats." Develop messaging that educates and reminds adults and kids before, during, and after a visit to the river. Consider engaging the expertise of Leave No Trace traveling teams and planning basin-wide initiatives that reinforce LNT principles.
- Develop or sponsor educational programs and workshops on water safety, stewardship of the river and its resources.

• Participate in the annual Delaware River Sojourn (suggested explicitly for the Lower Delaware River Management Council).

Water Trail Plan - Website

• Obtain permission of private access site owners, liveries, and campgrounds to include information on the website.

Safety

The Lower Delaware River Management Plan and 2007-2011 Action Plan have encouraged collaboration between administering agencies in Pennsylvania and New Jersey to establish recreational guidance, rules, and field or river-based partnership, in the following ways:

- **Fees.** Review those collected by Pennsylvania and New Jersey to pursue a standard fee (or no fee) program whose goal is to support access safety, access, or water quality-related amenities where funds are collected.
- **Rules.** Re-establish on-water rule enforcement and work together to establish the capacity to monitor activity and enforce regulations governing excessive noise and intrusive or high-risk activities in the river corridor, particularly during peak periods of use.
- **Patrols.** Establish bistate river patrols, viewing Pennsylvania-New Jersey rescue squad cooperation in certain jurisdictions as models.
- **Businesses.** Work with retailers and manufacturers to encourage safe and courteous use of personal watercraft
- **Outfitters.** Work with commercial operators to honor health and safety regulations and to encourage customers to respect parking guidance, observe private land ownership along with the river, and pack trash they create or discover on the river.

Interpretation

Interpretation Plan for the Lower Delaware River Corridor

Consider the <u>Delaware and Lehigh Navigation Canal National Heritage Corridor Action Plan</u> as a model. The plan should encourage the protection of resources, promote safe and courteous river use, and raise awareness of the value of the Lower Delaware Wild and Scenic River's resources, and utilize signage and interpretive assets in place among corridor partners. Consider specific Leave No Trace messaging as an adjunct to site-specific suggestions and guidance.

III. Explore Activities to Grow Partnership Capacity

Develop a collaborative of river users, interpretive and program staff, "friends" groups and businesses. This group may or may not overlap with the ad hoc Recreation Committee recommended above. They should be familiar with the access site data in <u>Table I</u>:

- Permits, enforcement responsibility, and use of the permit funds;
- Boating laws and enforcement responsibility;
- Jurisdiction-by jurisdiction law enforcement capacity to address roadside and parking overflow situations;
- Jurisdiction-by-jurisdiction capacity to provide sanitation support for river users;
- Opportunities to fund river recreation-related public services such as river clean up tools or Leave No Trace training; and
- Process for monitoring recreational use as identified by the desired conditions.

This group should be guided and supported by the Lower Delaware Wild and Scenic River Management Council with initiatives that can incorporate their respective interests as business owners, landowners, community members, agency staff, and municipal leaders.

IV. Update the Lower Delaware Wild and Scenic River Management Plan

The <u>Lower Delaware Wild & Scenic River Management Plan</u> was developed to support federal protection designation in 1999. It would be helpful to update the Plan so that it remains relevant for the Management Council in the protection of the values for which the Lower Delaware Wild and Scenic River was protected.

V. Offer Designation Status to Non-Designated Municipalities

Reach out to eligible, non-designated municipalities in the Lower Delaware Wild and Scenic River with an offer an opportunity to consider designated status. Initiatives pursued by the Lower Delaware Wild and Scenic River Management Council would be strengthened and more effective through a greater breadth of collaboration.



Photo courtesy of the Delaware River Greenway Partnership

Attachment I

Delaware River Water Trail Plan

Items to be Completed

These actions provide a topline review of updates to the 2006 Delaware River Water Trail Plan to identify actions that have not yet been completed.

River Resources: Access Points

This plan suggested exploring locations for new access points and examining the Portland Reliant Energy Power Plant access for reopening.

- The Portland Reliant Energy Power Plant has not been approached to encourage the re-opening of water trail access. With permission, large groups can still use the site. This section of the river has few access launches and parking facilities.
- **Delaware Canal State Park** There have been no new river access sites developed along the canals of Pennsylvania or New Jersey since 2006.

River Resources for Camping and Overnight Trips

- The Lower Delaware corridor offers camping opportunities, and the area may offer growth
 for inns, bed and breakfasts, and motels considering the growth of private rentals such as
 <u>Airbnb</u> and <u>Vrbo</u>.
- Island camping could be investigated.
- Inns, bed and breakfasts, and nearby motels could assist vehicular traffic and parking overflow by providing shuttles for their customers who plan to enjoy the river.

Signage and Wayfinding

It was recommended that the Delaware River Water Trail look to the Delaware & Lehigh National Heritage Corridor signage system, which uses National Park Service specifications.

- Post the Delaware River Water Trail branded sign at major access locations: signs purchased have not been installed.
- Mark access points where appropriate.
- Work with Pennsylvania Department of Transportation, New Jersey Department of Transportation, New York Department of Transportation, and the Delaware River Joint Toll Bridge Commission (I-80 and south) to place identification signage on bridge crossings.
- Consider offering basic access and safety information in Spanish as well as English (Bilingual signage is offered at a few access points).
- Work with state departments of tourism/transportation regarding access signage.

Safety and Education

- Increase the frequency of volunteer safety patrols.
- Increase availability of paddling instruction programs. *This is mentioned as the increase in partnership communities is singular and deserves additional consideration*. Outfitter presence has grown and may provide basic instruction. There have been few efforts to increase paddling instruction: Two Rivers Kayaking (Easton) provides instruction; Big Bear Gear (Lambertville) offers canoeing instruction as a service.
- Work with emergency personnel along each river section and large management unit (such as NPS) to receive feedback and input on access locations, GPS points, and numbering at both the river access launch/retrieval area and trailhead. This has taken place at times and could be improved with a comprehensive effort.
- Information at access site kiosks can recommend a skill level for a particular river section.
- Investigate the potential for using solar-powered call boxes at river access sites, so information can be received by 911 dispatch with a Global Positioning System (GPS) unit.
- Use a special radio frequency that provides safety information and warns of hazardous river conditions; provide more radio contacts in different regions.

Boating Regulations and Fees

Boating regulations are inconsistent from state to state, and from state to federal government; they are unevenly applied even among access sites in the same state. New Jersey and Pennsylvania have reciprocal fishing regulations and law enforcement, but not reciprocal boating regulations. Regulations applicable to different classes of boaters vary in each state. It is recommended that State websites include information on all state requirements.

One bright light is the New Jersey Department of Environmental Protection Division of Fish and Wildlife <u>Delaware River Boat Access Sites</u> resource includes basic access information for Lower Delaware Wild and Scenic River launches.

Additional Information Needs

- Conduct a gap analysis to determine locations and needs for additional access points, and determine feasible locations based on physical, environmental, and financial considerations.
- Consider where land trails/open spaces provide:
 - Access to natural, scenic, cultural, or historic resources;
 - o Opportunities for resource interpretation or education;
 - Access to community resources; and facilities to serve water trail access areas. These were addressed at a few sites: e.g., Bulls Island and Delaware Canal State Park.

Public Outreach

- Distributing information about the Delaware River Water Trail, significant natural and cultural resources, safety, access, and other aspects of the river must be an ongoing effort.
- Efforts should be made to establish a "Leave No Trace (LNT)" program
 While Leave No Trace is explained and endorsed on the website, and an annual cleanup is
 coordinated by New Jersey Parks with the support of the New Jersey Clean Communities
 Program, evidence of its practice is not widespread.
- Develop or sponsor educational programs and workshops on water safety, stewardship of the river and its resources. *There are no river-wide coordinated programs, initiatives, or messaging campaigns relative to recreation-related stewardship.*

Sign Plan

- Develop sign templates using the <u>D & L National Heritage Corridor sign system</u> as a model. Sign templates exist, but they have not been used for water trail access points.
- Where public agencies require their designs for signs, develop designs incorporating common features of both the agency and the Water Trail.
- Develop a handbook that includes signage functional types and guidelines/standards for their location, design, installation, and maintenance. A sign 'standards' document for Delaware Water Trail signs has not yet been utilized.

Website Development

The website, <u>www.delawareriverwatertrail.org</u> is maintained by the Delaware River Greenway Partnership (DRGP) who facilitated a complete redesign (mentioned in 'Public Outreach' above) in 2020. This website is a standalone site.

Obtain permission of landowners, liveries, and campgrounds to include information on the website.



Screenshot of www.delawareriverwatertrail.org

Attachment II

National Wild and Scenic Rivers Steps to Establishing User Capacity

The steps described here have been developed by the Interagency Wild and Scenic Rivers
Coordinating Council. They are detailed in a white paper entitled <u>Steps to Address User Capacities for</u>
<u>Wild and Scenic Rivers, A Technical Paper of the Interagency Wild and Scenic Rivers Coordinating</u>
<u>Council February 2018</u>⁹.

Step 1: Describe the baseline and current conditions

A fundamental aspect of the management of a wild and scenic river is understanding the river values for which the river is protected, as well as the baseline conditions of those values at the time of designation. Therefore, the identification of this information is a critical first step in the user capacities process, as well as the broader Comprehensive River Management Plan (CRMP) process.

The baseline conditions of the river's free flow, water quality, and values for which the river is to be protected and managed, its Outstandingly Remarkable Values (ORVs), can be collected from a variety of sources. Social and biophysical information documented at the time of designation can be very useful, such as in a pre-designation study, testimony from the designation process, river recreation guidebooks, interviews with clubs and outfitters, or other historic records on past uses. If historic information is limited, estimate baseline conditions based on a reasonable evaluation of present conditions. Discussing baseline conditions with residents and recreationists who can provide historical as well as current anecdotal information may also be valuable in this process.

For wild and scenic rivers in which use levels currently threaten river values, managers should promptly take action to prevent degradation by adopting or adjusting user capacities decisions. Substantial investment in terms of data collection, monitoring, and analysis is warranted to identify appropriate user capacities and management strategies for the protection of river values. Decisions about user capacities and other management measures should be informed by the level of public engagement that is appropriate to the decision being made.

In contrast, if use levels do not threaten wild and scenic river values and the established desired conditions for the river values, the same degree of investment in data collection, monitoring, and analysis to support decisions about user capacities is not necessary for these circumstances if it has been determined that use levels in the river area are not near the point of threatening river values or established desired conditions. CRMPs for these rivers should recognize the possibility that user capacities decisions may need to be reviewed and revised as use levels change. If changes in use levels threaten river values, increased investment in planning would be needed to provide for an appropriate level of data collection, monitoring, and analysis to support user capacities decisions."

⁹ https://www.rivers.gov/documents/user-capacities.pdf, Harn, Chaudet et. al, 2018

"Identify all uses that can affect visitor experience and river values, as well as the existing management direction and decisions related to such uses. Characterize the different kinds of existing public uses and other uses. Likely trends for future uses and potential for new forms of access, any known problems where trends indicate a decline in conditions, and their relationship to visitor experience should also be identified. Include an infrastructure inventory to help determine whether any proposed facilities that could affect free flow could also impact the river's classification. Facilities that would alter a WSRs developmental character from wild to scenic classifications or from scenic to recreational classifications are not permitted.

Step 2: Identify desired conditions for river values and classifications

Step 2 establishes the desired conditions for the river values and social setting of the WSR, which should reflect conditions that will protect and enhance all river values while allowing for uses consistent with the Act, including a segment classification. "Desired conditions" are the resource conditions, visitor experiences and opportunities, and facilities and services that will protect and enhance river values while allowing for uses consistent with the Wild and Scenic Rivers Act.

The identification of desired conditions in a CRMP has a broader context than just user capacities. However, integrate visitor use, other public uses, and administrative uses into desired conditions to form the basis for meaningful evaluations of user capacities. Distinguish between desired conditions that would protect river values' baseline conditions and those that would enhance them, especially if desired conditions are set at a level substantially above baseline conditions.

WSR classification is another critical consideration when defining an area's desired conditions, particularly for water quality and free flow. A river's classification helps establish the range of permissible recreational access and infrastructure that would be consistent with protecting the river's character and influence visitors' recreational experiences.

It may also be appropriate to divide the WSR into smaller analysis areas to address user capacities effectively. Analysis areas may be chosen based on WSR classification, geographic similarities, common types of user activities, similar desired conditions, user access levels, or development levels--for example, wild/wilderness/backcountry versus recreational/front country.

Once desired conditions are identified, compare them with existing conditions. This comparison will help identify the need for action to achieve desired conditions and will also inform the scope of action for relevant NEPA documents.

Step 3: Identify the kinds of use that the WSR corridor can accommodate

Step 3 connects public uses to the facilities that support those uses within a given segment or river corridor. Facilities may already be in place and designed to provide for specific kinds of public uses, or they may be proposed for future uses that would not exceed thresholds, discussed in Step 5.

For example, a primitive launch may be sufficient to accommodate inflatable kayaks. A concrete boat launch and large parking area may be in place or may be anticipated in the future to allow for certain levels of safe motorized boat launches to maintain water quality and stream bank integrity. If the impact of certain kinds of public uses on river values depends upon certain facilities being in place, clearly identify that relationship in the CRMP.

Step 3 also further refines, if possible, the categories of uses consistent with identified desired conditions. For example, some segments may have no relationship between motorized, on-river uses and the achievement of desired conditions. On other segments, however, there may be concern about the effects of petroleum-based fuel use on water quality conditions. For these segments, river managers would specify in Step 3 that motorized, on-river use is probably consistent with desired conditions only if use levels are very low or technological improvements keep hydrocarbon discharge rates from violating water quality thresholds.

Step 4: Identify measurable indicators for the desired conditions

This step asks planners to establish appropriate indicators to measure conditions in the river corridor is another important aspect of linking user capacities to desired conditions.

An indicator is a specific resource or social attribute that can be measured to track changes in conditions associated with human use. Indicators warn river managers about deteriorating conditions and assess progress toward attaining desired conditions. CRMPs should include a monitoring program of both social and resource indicators that are relevant to the desired conditions and allow for repeat measurements at appropriate intervals.

Examples include camp encounter rates or identification of a percent of an area that is bare soil for high-use campsites.

Step 5: Establish thresholds for each indicator

This step is for setting threshold conditions that can be used to protect river values and develop capacities for the river corridor.

The term, threshold, is used here to mean the minimally acceptable condition of an indicator. Thresholds identify conditions that prevent degradation of a river's baseline conditions, but river managers also may move thresholds upward as conditions improve to prevent backsliding of enhanced conditions. Reference thresholds throughout the user capacities determination process to ensure that uses are consistent with the protection of baseline conditions and non-degradation of river values.

An indicator might be the number of user days where groups must camp within sight or sound of other campers along a WSR. The threshold might be a camp encounter rate of 25 percent.

Step 6: Identify triggers that elicit management response

A trigger is a point at which changes in an indicator prompt a management response to ensure that the threshold for that condition is not crossed. The CRMP should identify and describe trigger points for each indicator; the suite of potential corrective actions that might be taken in response to deteriorating conditions, ensuring that they do not reach thresholds; and the decision process that will be used to select and implement appropriate action.

Using the previous example of a threshold of 25 percent camp encounter rate as an indicator for the recreational ORV of a river corridor, a trigger might be set at a camp encounter rate of 20 percent which, if reached, would require a management response designed to prevent the indicator condition from declining further.

An indicator may have one or a series of progressive triggers that prompt various management actions if conditions reach those triggers.

However, the need to utilize thresholds and triggers and the number of triggers to develop will likely vary based on the river's management complexity and identified values. Thresholds and triggers likely would not be necessary for instances where uses and river value do not impact each other. For instance, the existence of Zion National Park's canyons along the Virgin Wild and Scenic River and its geologic ORV may not be affected by the amount of use within the river corridor, nor will this ORV effect desired social conditions. As a result, there would be no need to develop a threshold or triggers for the geologic value related to social conditions. Nonetheless, in all cases, it is important to document the rationale that informed either the selector of particular thresholds and triggers or the determination that doing so is unnecessary in a particular instance.

Step 7: Identify management action to take when triggers are reached

This step provides an important opportunity to identify specific actions prompted if triggers are reached. Progressively stronger actions may be implemented as resource conditions deteriorate toward thresholds.

The geographic scale of the proposed management actions should be consistent with the identified user capacities analysis area and may vary throughout the river corridor. For example, if user capacities are being analyzed throughout the entire corridor, but one river segment has exceptionally high use, then the management actions prompted by trigger conditions could include both corridor-wide conditions and specialized conditions that apply only to one segment. This step highlights those actions that are specifically intended to ensure that thresholds are not crossed and river values are protected.

Examples of management actions can vary from pursuing education and signage efforts about river stewardship and Leave No Trace principles, to implementation of permit systems for camping and other use of the river corridor, to increased river steward or ranger presence. Such options for

actions to take will vary depending on the indicator conditions and the issues associated with the particular river. But it is important to recognize that the approaches taken can and should vary depending on the circumstances and can be applied to designated rivers that predominantly flow through federal lands to those that do not, such as partnership wild and scenic rivers.

In addition, a CRMP may describe both management actions immediately authorized upon the effective date of the plan as well as actions that could be taken in the future. Actions that are ripe for decisions are the actions most likely to be analyzed and decided upon within the CRMP process.

Step 8: Determine the WSR corridors user capacities

We can now establish user capacities for the wild and scenic corridor indicating the amount of use that can be received without crossing thresholds for indicator conditions that would degrade river values. Establish capacities by site, area, or kind of public use, provided that, at a minimum, the overall, corridor-wide maximum number of people is also discussed, and the relationship between these subsets of capacities and total river corridor capacities is described."

There is almost always a history of past uses or strong advocates for maintaining current uses when river managers prepare CRMPs for wild and scenic rivers. While these uses may be consistent with the continued protection of river values, the CRMP should explain that the use level decisions were based on the consideration of how they affect river values, rather than a reluctance to change the status quo.

As a result, the CRMP process should utilize credible scientific expertise to support user capacities decisions. The information needed to support upon which to base user capacities estimates may vary depending upon a variety of factors and may come from a variety of sources. Sources can include existing data, published scientific studies, modeling of future scenarios, panels of experts with local knowledge, professional judgment, and social and resource surveys. For those rivers that are currently near or at user capacities, user capacities decisions must be based on an appropriate level of public involvement and are transparent and well documented. If additional information is needed before a final user capacities decision is made, consider establishing interim capacities and associated actions to ensure that river values will be protected and enhanced until a final decision is made.

Addressing user capacities, like many aspects of a CRMP, may involve more than one alternatives. Develop alternatives in the CRMP document that integrate various user capacities into settings that protect and enhance the river values and respond to identified issues. For example, in one alternative, a recreational segment could emphasize driving for pleasure and allow for an access road parallel to the river with scenic overlooks or pullouts; while another alternative might provide road access only to specific trailheads or campgrounds with parallel access only non-motorized. These different approaches could result in different total user capacity numbers as well as different recreational settings and mixes of kinds of uses, with each alternative protecting and enhancing river values in different ways.

Avoid creating a range of alternatives based on the concept of "least to most," Rather, provide alternative courses of action that balance public use and enjoyment and protect river values in all alternatives in different ways and with different emphases. Design alternatives to provide a mix of conditions and opportunities so that each of the alternatives displays meaningful and different ways of meeting a variety of interests in some manner rather than a "goldilocks" alternative mix that is too much, too little, and just right.

Step 9: Establish monitoring and adaptive management approach

Implementation of a monitoring program will help ensure that the quantity and mixture of use do not adversely affect river values and that management actions are adapted accordingly.

Indicators should be chosen based on their relevance in determining whether user management actions are: implemented as designed; effective in preventing degradation of river values; and based on valid assumptions about user behaviors, the relationship of uses to river values, and changes in social perceptions about crowding.

An adaptive management strategy can be a critical tool to utilize in managing user capacities on WSRs, as new information can help to test assumptions and shape future management approaches. As a result, CRMPs should describe the process for adjusting capacities based on monitoring and other new information or changed circumstances. For example, changes in technology like drones, paddleboards, packraft, etc.





Left: Delaware River Basin Commission <u>Delaware River Sojourn 2019</u> Right: NYC Expeditionist <u>Post</u>

Attachment III

Fall 2020

Lower Delaware Wild and Scenic River Use Survey Questions

- Q1 a. What is your role or interest in the Lower Delaware Wild and Scenic River?
- Q1 b. If you are a river user, please identify the uses with which you are most familiar. Choose up to three.
- Q2. What does the Lower Delaware River's 'wild and scenic' designation mean to you? Check all that apply.
- Q3 a. Please identify your primary access location one which you manage, or which has the greatest impact on your river-based business, recreation, or other personal experience.
- Q3 b. Please describe the current level of river use in the vicinity of this Primary Access Location:
- Q3 c. Describe the growth of recreational use on the Lower Delaware Wild and Scenic River in the vicinity of this Primary Access Location:
- Q4. Which agency or organization is responsible for managing the use of public spaces around the access point you have identified above, including posting signs and enforcing laws regarding parking, trespassing and inappropriately leaving trash and human waste on public and private property? Check
- Q5. Which, in your opinion, are primary contributors to the change in use in the vicinity of the access point mentioned in Question 3a. above during the past 10 years?
- Q6. Which additional factors have contributed most heavily to the popularity of the Lower Delaware Wild and Scenic River?
- Q7 a. What are the most significant positive impacts of increased river use?
- Q7 b. What are the greatest negative impacts of increased river use? Check all that apply. Q8 a. Please list an organization, agency, or company whose records might include their parking capacity (e.g., when lots were built or expanded), retail sales, and equipment rentals who could help us estimate the number of people visiting the Lower Delaware Wild and Scenic River.
- Q8 b. Please share the NAME of an individual at the above-mentioned organization who could help us estimate the recent growth of river visitation.

- Q8 c. Please share an EMAIL ADDRESS for the individual at the above-mentioned organization or agency who can help us estimate the recent growth of river visitation.
- Q9. The Lower Delaware Wild and Scenic River legislation provides protections for both recreation and economic growth in its Management Plan. (See

https://www.lowerdelawarewildandscenic.org/resources/documents/lower-delaware-wild-and-scenic-management-plan) How might the Lower Delaware Wild and Scenic River Management Council (LDWSR) be composed to get the most input as possible in balancing these goals? Check all that apply.

Q10. There are additional values for which the Lower Delaware Wild and Scenic River needs to be managed according to the Lower Delaware River Management Plan

(https://www.lowerdelawarewildandscenic.org/resources/documents/lower-delaware-wild-and-scenic-management-plan). Which do you think are linked most closely with recreational river use?

- Q11. Is there anything else you would like to suggest to the Lower Delaware Wild and Scenic River Management Council, whose charge is to 'protect and enhance' these values?
- Q12. The Lower Delaware Wild and Scenic River Management Council would very much like to discuss this subject further with landowners, business owners, agency representatives, and river users. Indicate 'yes' below if you are open to speaking with us during a 30-minute appointment. We may not be able to speak with everyone interested, but we will make every effort to do so!
- Q13. Your First Name
- Q14. Your Last Name



Scudders Falls Access Area at Delaware and Raritan Canal State Park

Attachment IV

Outreach and Recruitment

Lower Delaware Wild and Scenic River businesses geared toward tourism have grown due to the hard work and collective expertise cultivated by its cities, townships, boroughs, and entrepreneurs. It should be no surprise that river recreation has benefitted from the awareness, amenities, and events that have increased the corridor's stature as a desirable destination.

The National Park Service, local jurisdictions, businesses owners, trade associations, and lodging services such as Airbnb and VRBO utilize images of the Lower Delaware Wild and Scenic River, tributaries, and canals to attract visitors.

Retail Awareness

Many communities, businesses, and agencies along the Lower Delaware promote the river and encourage visitation through websites and social media. Just a few of the posts are included below.

The Greater Lambertville Chamber of Commerce has compiled a list of 3 Free Boat Launches.

- Upper Black Eddy Access (Route 32, just below Milford bridge)
- D&R Canal State Park Lambertville (off Bridge St. behind Lambertville Station)
- Holland Church Access (off River Rd., 1 mile south of Riegelsville bridge)

Each of the twelve Delaware River Towns has its page on the <u>Chamber website</u>. Examples include the following:

"Enjoy all of what <u>Frenchtown</u> offers in fine dining, shops, galleries, and the beautiful views of the Delaware River. It's the perfect location for bicyclists who can ride along the Delaware to Trenton or along the Raritan River to New Brunswick, or for those who love a scenic stroll along the canal paths."

<u>Lambertville</u> was named by Forbes Magazine as one of the "Top 15 Prettiest Towns in America." If that isn't reason enough to visit, consider it was also recently named "#1-weekend getaway city in New Jersey" and one of 12 "Perfect Cities to Get Married In."

"<u>Milford</u>, New Jersey is an interesting town situated in western Hunterdon County, New Jersey, United States. Situated beside an 18th-century stone mill, Milford's bridge is a gathering spot for sunset-chasers and romantics. To stand here is to enjoy a matchless view of the Delaware River, its water widening to a lake-like effect upstream before winding off between hills and cliffs.

Just north of Lambertville, alongside the Delaware River, sits the tiny Victorian-era town of <u>Stockton</u>, named for U.S. Senator Robert Field Stockton, who was instrumental in the creation of the Delaware and Raritan Canal. The Canal is now a State Park, with recreational facilities sure to make any outdoor enthusiast happy.

The New Hope Chamber of Commerce <u>website</u> showcases a fine photo of the Delaware Canal, there is no mention of the Canal, Delaware Canal State Park, or Delaware River.

River Guides

There are many guides and maps which provide access and interpretive information for paddlers.

- New Jersey Department of Environmental Protection River Boat Access Sites
- Pennsylvania Fish and Boat <u>Article</u> highlights launches in Pennsylvania
- Delaware River Water Trail Map

Paddlesports Outfitters

The Lower Delaware River has experienced a significant impact from the efforts of river-based outfitters, particularly those which rent tubes, and their impact in the vicinity of launch points. Outfitters on the Lower Delaware also rent canoes, kayaks, and rafts. This is a list of the primary firms with a list of their capacity to 'touch' consumers via social media, a primary means of initial contact, relationship development, and return business.

Bucks County River Country - Point Pleasant, PA

https://www.rivercountry.net/

https://www.facebook.com/Bucks-County-River-Country-95141206000/?ref=page_internal

8,044 people like this

8,306 people follow this

https://twitter.com/BCRiverCountry

462 followers

Delaware River Tubing - Milford, New Jersey

https://www.delawarerivertubing.com/

https://www.facebook.com/njtubing/

34,871 people like this

34,636 people follow this

Unassociated blogpost

https://southjerseyadventures.wordpress.com/2012/08/13/delaware-river-tubing-frenchtown-ni/

http://delawarerivertownslocal.com/rest-in-peace-greg-chance-the-famous-river-hot-dog-man/

Twin River Tubing – Phillipsburg, New Jersey

https://www.twinriverstubing.com/

https://www.facebook.com/twinriverstubing

2,577 people like this

2,607 people follow this

https://twitter.com/TwinRiverTubing - 508 followers

Delaware River Family Campground – Columbia, New Jersey

https://campnj.com/campgrounds/delaware-river-family-campground

https://www.facebook.com/Delaware-River-Family-Campground-369421693096008/

3,106 people like this

3,155 people follow this

Big Bear Gear - Lambertville, New Jersey

https://bigbeargearnj.com/pages/delaware-river-tubing

https://www.facebook.com/BigBearGearNI/

1,968 people like this

2,075 people follow this

https://twitter.com/BigBearGear1

32 followers

https://www.instagram.com/bigbeargear/

691 followers

Canoeing, Kayaking Instruction

There is positive movement in the availability of paddlesports instruction.

Two Rivers Kayaking offers <u>paddling lessons</u> and rentals in Easton. These are the trip options at this time:

- Downtown Easton
- Sandt's Eddy to Easton
- Easton to Riegelsville

Big Bear Gear in Lambertville initiated its tubing outfitting services in 2021 and plans to offer canoeing instruction.



Bucks County River Country - Point Pleasant, Pennsylvania

Attachment V

Tohickon, Tinicum, and Paunacussing Creeks

These three creeks are included in the protection afforded the Lower Delaware River. Their nature as recreation destinations varies substantially from the Lower Delaware and each other. Notably, recreation activity has a welcome impact on their respective communities. As is illustrated by the story of the Tohickon (below), the popularity of the creek for its recreation value can fuel public support for the resource in the face of an environmental (or other) challenge.

Tohickon Creek offers high-quality intermediate to advanced, destination recreation for whitewater paddlers hailing from throughout the Mid-Atlantic region. While the Tohickon is often paddled year-round, the Pennsylvania Department of Conservation and Natural Resources provides recreational whitewater from Lake Nockamixon two weekends each year. Recreational releases flow four miles from Ralph Stover State Park, near Pipersville, Bucks County to the confluence with the Delaware River at Point Pleasant.

A proposal has been made to downgrade the water quality standard for Tohickon Creek. A significant, negative public response stayed this downgrade for now, and the process to maintain or improve water quality here remains at this time. This <u>video</u> produced by the Delaware Riverkeeper Network describes the run and the water quality issue.



Tohickon Creek. *Photo by Tim Palmer*

Tinicum Creek is notable as the host of visitors visiting the Frankenfield Covered Bridge, one of twelve covered bridges in Bucks County. It is one of the longest covered bridges in the county, measuring 130 feet.



Tinicum Creek. Left: photo by Tim Palmer. Right: set of 3 photos by Raymond Finkelstein.

Paunacussing Creek recreational river traffic is limited as well. Tourists may be those interested in its historic squared stone, arched bridge in Solebury Township. It was built in 1854 and is listed in the National Register of Historic Places.



Paunacussing Creek. Left: photo by Tim Palmer. Right: photo by Shuavev

Attachment VI

Lower Delaware River Stakeholder One-on-One Comments

The following provides elaboration on the comments received during one-on-one interviews.

Paddling Enthusiasts

"Outfitters have introduced many people to the river. I'm seeing a lot of people show up with their inner tubes, not just using liveries to get on the river." (Lower Mt. Bethel resident, boater on upper sections of Lower Delaware)

"(Concerning creating more access) The big benefit that I see is that a lot of those people are going to come to the river, splash once, and they might not be back for five years. You know, they're not going to become an advocate, but the more people that we can get to experience the river, not just the residents that live along the river, I feel like that's going to increase the number of people that fight for its quality.

"My son and I did SCUBA dive up near Riegelsville. That was an extraordinary experience. We were going to go up to the Water Gap, but it was closed at our favorite spot, so we came back down to Riegelsville, and there's kind of like the bones of the river: there's all this bedrock that protrudes 10, 15, 20 feet out of the water. I've been wanting to do that for years, and my son just got certified this year, so we were able to do that together. So that was neat too.

"I was a scout as a boy, and view cleanups as social experiences. I belong to the Hackensack River Canoe and Kayak Club and Mohawk Canoe Club and have participated in two cleanups on the Musconetcong where they provide bags and pickups. There is awareness now, and since more people are going out let's put more on everyone: pick a section of the river, and ask businesses to help. People will be walking and paddling boats, and doing trash pickups: as it was in scouts, cleanups are a social experience.

"It is frustrating to find access points that are posted to only be used by residents, like in Columbia, just of Portland. There may be one in Belvidere and Forks, as well. We should be talking about how to improve the situation. Using Paulinskill as an example: when we recently paddled there, we needed a sticker. I know Portland could use the support: ask the people dropping off customers there to pay to do so, maybe only on weekends. Get some money \$ from parkers. Ask the committee to consider grants to Portland. " (Former resident of Belvidere, a boater who paddles Portland to Bull's Island)

"The National Wildlife Foundation has managed to bring into its fold hunters, birders, and preservationists. I wonder if that's a model that could be replicated because there are common interests, although I am pretty anti-hunting. I think that's a powerful lobby, and I just think it's remarkable when you can bring into the fold various constituencies. If you got business owners

and Chambers of Commerce, and the DNR Canal Society, which I'm a member of, and bicycle clubs, and kayaking clubs and rowing clubs. You know if you could start getting people to work towards the common good, that would be an amazing thing, starting with what people can agree on." (Lambertville resident)

"Are jet skis appropriate to even be allowed to be put in at the Kingwood launch? I don't mean to sound Draconian, but when you're weighing public good, is this the right place for a jet ski? And I'm not sure that it is. So you're asking what would I do – are there permits required and what does the research say about should jet skis even be on this? So does trash come from the tubers? I'm positive there are beer bottles that show up on my yard but when the river floods, you know when it comes up high, I've had a port-a-potty come and land in my yard." (Kingwood resident)

"My goal is to paddle the whole length of the Delaware River in my packraft. I have been to the Lower Delaware as far as 20 miles below Trenton and plan to finish in 2020. I often put in at Smithfield Beach. and park in Portland on 611, mainly on weekdays so she can find parking spaces." (Resident of upstate New York)

"I live in the house of a friend on the river who rented it out, then sold to me! He owns a small powerboat and puts in at Bull's Island in Kingwood. I also canoe paddle from Hancock, New York through Foul Rift to Wells Falls in Pennsylvania. It's usually not crowded on weekdays, and in 2019 it was only crowded on weekends." (Kingwood resident and boater)

"I'm a big believer in Leave No Trace ideas. And you know they were asking a lot of questions about the stress of having a lot more people on the river, and I think some people just aren't aware of what that means to Leave No Trace. And I think that would be a good way to go, especially on the islands, because people take breaks on the islands."

"5-6 years ago, we went up to Bulls Island. We were ready to launch, and somebody from the state of New Jersey parks department said, "Sir you need a launch permit to launch at Bulls Island." And I said, "Oh, you know I have a launch permit for PA." And they were like, "No, no. For this access ramp, you need one." And I said," How much are they?" Because they're \$10 in Pennsylvania. So they said it's \$150 per craft. \$150? I paid \$300 for the kayak! " (Father and Son, boaters and residents of Frenchtown)

"So there are Leave No Trace materials – it's posted and there are bags there. What happens is people fill the bags and leave them at the bottom of that sign. So you'll see the sign that says "Leave No Trace" and at the end of the day you see that wooden park sign with full, yellow bags and diapers just piled up next to it. " (Scudder's Falls boater)

"I think if people had paid a little bit of respect to the environment this year, there wouldn't have been as many issues or they wouldn't have been so noticeable, meaning leaving garbage behind. Lambertville started to get crowded when people got moved from Scudders, then Lambertville started to get people's attention, but then I think the police started, you know,

moving people on from the boat ramp because it's a boat ramp it's not for people to sit and barbeque. And the Wing Dam just got packed, of course." (Lambertville boater)

"And the jet skis. And they're a concern for different reasons. I mean the jet skis tend to be people that are – I don't want to be negative – but they are enjoying their jet skis by doing lots of donuts and racing and playing with each other and getting very close to all manner of craft, often falling in the wake of another powerboat so that they get the wake off of that powerboat, and it just seems much more dangerous to me. And there's no one – we used to have, I think it was Coast Guard – or someone that used to come out and patrol years ago, but we didn't see anybody for the last couple summers. So there's no one to even give a reprimand or anything." (Upper Black Eddy resident, boater)

"We need education programs and good signage." (Upper Black Eddy resident, boater)

"The free resource is awesome for the underserved. Let's encourage more respect for the river, education, and promotion of pack-it-out practices. Let's also encourage Spanish-speaking state staff such as interpretive rangers and police." (Scudder's Falls boater)

"I have been at the Fairview launch in the summer at 6:00 or 7:00, so I have an hour before sunset, which is a great time to fish anyway. There are times I've gone there to see a whole bunch of vehicles there with NY license plates. And I'll be like, okay. So I go down to my spot, and all of a sudden, I see all of these people down there partying, doing whatever. I come back half an hour later. Cars are gone, but I go down on the river, and empty cans, cases of Corona beer, bottles, whiskey bottles, gallons of whiskey bottles empty, diapers, clothes all over the place, graffiti all over the trees, spray paint. It's been very frustrating for me." (Kingwood resident, avid angler)

Residents

"I would say that I most often walk along the river pretty much every day. Due to the pandemic, everybody was looking for someplace to be outside, which is amazing. It's great to see so many people enjoying the river and being outside." (Frenchtown resident, walker)

"Frenchtown River Ambassadors and <u>Sustainable Frenchtown</u> - This organization's vision is for Frenchtown to be a model for cultivating community and river stewardship among residents and visitors. A summer volunteer corps of Frenchtown River Ambassadors will locate at a central crossroads location on summer weekend days from June 26, 2021, to Labor Day:

- *Building* community through welcoming river visitors, and providing helpful information for responsible river tourism;
- *Outreaching environmental stewardship* and *education* for visitors, volunteers, and residents; and
- *Promoting local businesses* by integrating visitors with services provided by businesses in the corridor.

River Ambassadors will

- Welcome visitors and share information on parking, public restrooms, river safety and stewardship, local businesses, etc.
- Lead a "youth hour" with an environmental education session for children.
- Lead a river "clean up hour" for visitors and community members.

"The River Ambassadors program has been approved by the Borough of Frenchtown and is endorsed by Sustainable Frenchtown, Love Frenchtown, Frenchtown Vigil for Justice and Peace, and the Lenape Nation of Pennsylvania. The 2021 project budget is \$800."

Agency Staff

"The Delaware River Basin Commission needs to approach 50,000+ gallons of questionable water to be tested as a problem." (Delaware River Basin Commission staff)

"One of the requirements for my new staff person is that they had to be bilingual English-Spanish, so that's a whole new realm for us to get into that, into translating, so I think that will be a big part of her responsibility, me helping guide her through that doing some of these virtual programs and things and translating a lot of our educational materials over. (New Jersey State Park staff)

"It would be helpful for us – I don't even know how you could do this – but I always kind of wonder if there are more opportunities if use is not so concentrated: for tubing to be done beyond where it is now. People typically go from Kingwood down to Byram Boat Launch or down to Point Pleasant. This year, we saw a tremendous increase in people all of a sudden putting in tubes at Bulls Island and then floating down to Lambertville.

"There might be an opportunity to let people know if this is an activity that they want to do, that they could go tubing from Fireman's Eddy down to Washington Crossing. I kind of feel like Washington Crossing State Park is an underutilized official put-in. People picnic there like crazy already, but it's a nice spot to put in or take out a boat, and you can't do that right now at that park. I mean people do that, but it's not like an official launch or an official access area. So you know, instead of people being concentrated in that upper area where they seem to go tubing, there might be a way to spread out that activity a little bit more just for the tubing-type of activity because it is kind of concentrated in those two spots because that's where two commercial entities have operated. The water moves slower in some of those other areas, so depending on the water level and flow, some of those other areas might not be as ideal, but people could still do it." (New Jersey State Park staff)

"We'd like to figure out a best practice and protocol to accommodate folks there. We do have a big capital improvement project going on at Wy-Hit-Tuk Park. And again, that's just within spitting distance of the river, but you've got the park and the canal and the canal trail and then the river. So we are developing that or improving that I should say. It's been a park since the early '80s, and it's had an organized campground there. It's always been just that organized,

typically scout groups, but we're going to open that up. We're working with the D&L Corridor." (Northampton County Staff)

Business Owners

"I run roughly thirty trips for eight weekends and I bet people must be spending money besides their reservations with us, nearby to purchase gas at the Citgo, a meal at the Bamboo House, and other items at Kathee's General Store. Anglers sometimes think tubing interferes with their fishing and others think tubing interferes with their serenity, but who's to say their serenity is more important than a family's fun adventure?" (Outfitter in Frenchtown)

"I am informed generally about what's going on, and I have attended some of the meetings. Professionally, I work in land stewardship, so obviously, ecological integrity is a concern for me, and just from a citizen perspective, I've tried to contribute to the cleaning of the Delaware. And I do think of course it's valuable that people are using the river because when you fall in love with something, you're more compelled to protect it. So I think it's finding that connection between why are we attracted to these spaces ... then making the leap to okay, we can all recognize their beauty and value: can we then make the leap to protect and steward them?" (Kingwood business owner)

"Let's offer safety directions and interpretive signage We e should raise awareness of river preservation needs and share the steps people can take to help out, and we should make there are enough State Troopers." (Stockton business owner)

Non-profit Organization Program Leaders

"We have like a residential River-Friendly Program as well as a business, school and golf course program as well. We work with almost any organization or entity that's interested in working with us. This specific program is focused on the Raritan Watershed, at this time, but there is interest to expand at some point to work on the Delaware River. We also conduct annual stream cleanups, on two weekends right around Earth Day: we run about a dozen stream cleanups in different towns. We work with the municipality, specifically their department of public works, to do the trash removal once volunteers collect it. It's one of our big spring events, and we have staff that shows up, give away T-shirts, and provide water and snacks and things like that." (Non-profit program leader)

"All partners should have a unified message, and we should thank long-time users, particularly our neighbors, our residents." (Non-profit program leader)

Municipal Leaders

"Let's develop a new management plan to which representatives are important contributors." (Municipal leader, New Jersey)

"I would like to see more designation of C1 waterways. In NJ it is the highest classification of waterways from actual water quality. New Jersey has designated most of the tributaries that run into the Lower Delaware Wild and Scenic segment as C1 waterways, which is the highest protection affordable to those tributaries. There are several in Pennsylvania that should get the same status but Pennsylvania doesn't have the same kind of system, as I understand it. So that's a point where we could get together with the states: a common acknowledgment of the water quality designations." (Municipal leader, New Jersey)

"We get the loud engines, and a recent phenomenon in the last three or four years – a lot of people blaring music on their boats. It's a lot of those two things. There's another pretty new phenomenon that's a real concern for landowners: wake surfing boats. Those waves are quite pronounced, and when those waves hit the river banks, it's not in a natural way a wave would naturally come down, so we're seeing a lot of erosion beyond the erosion that has been taking place along the riverbank anyway."

"Sometimes boats and jet skis move very quickly. The river's not very wide here, so with a lot of boat traffic and moving at a lot of different speeds – there's an accident waiting to happen."

"I think there needs to be a plan of how to manage the commercial end of use because it has spiraled out of control the last few years. I don't know how to do that. It's not like you can put limits on them. Tubing seems to be the hook to get everybody out here, then people realize that 'Oh, I'm not going to pay \$75 to go down the river when I can do it for \$10.' So that's why the private tubers have moved in, in such numbers." (Municipal leader, Pennsylvania)

"The businesses certainly welcome anyone who comes with money. There are only a couple of businesses. There's one Stockton grocery store, and there's the Stockton Market which attracts an awful lot of people. Most of the river people don't see the town merchants. I've never seen any of them at the river or very few. Merchants are busy making a buck, so they don't feel the influence of the river traffic. I don't think they feel responsible for the plastic bag they give you at the Stockton grocery store, that it may end up in the river. A lot of picnickers are packing their stuff. I don't think that they're a big economic asset to the town. I'm sure there's some. They buy gas. They probably stop at the grocery store or the liquor store to buy beer." (Municipal leader, New Jersey)

"Let's conduct cleanups at regular intervals; develop a steward emissary program; erect signage at regular access points; and enforce licenses." (Municipal leader, Pennsylvania)