DRWI
DATA, GIS, & Modeling
Work Group

dvrpc

July 23, 2018
DVRPC
Philadelphia, PA

Agenda

- **10:00 AM**: Welcome & Introductions
- **10:15 AM**: Fact Sheet Review
- **11:00 AM**: Update on Help Desk
- **11:15 AM**: Updates from Work Group Members
- **11:55 AM**: Meeting Wrap Up and Evaluation
- **12:00 PM**: Lunch

Welcome & Introductions

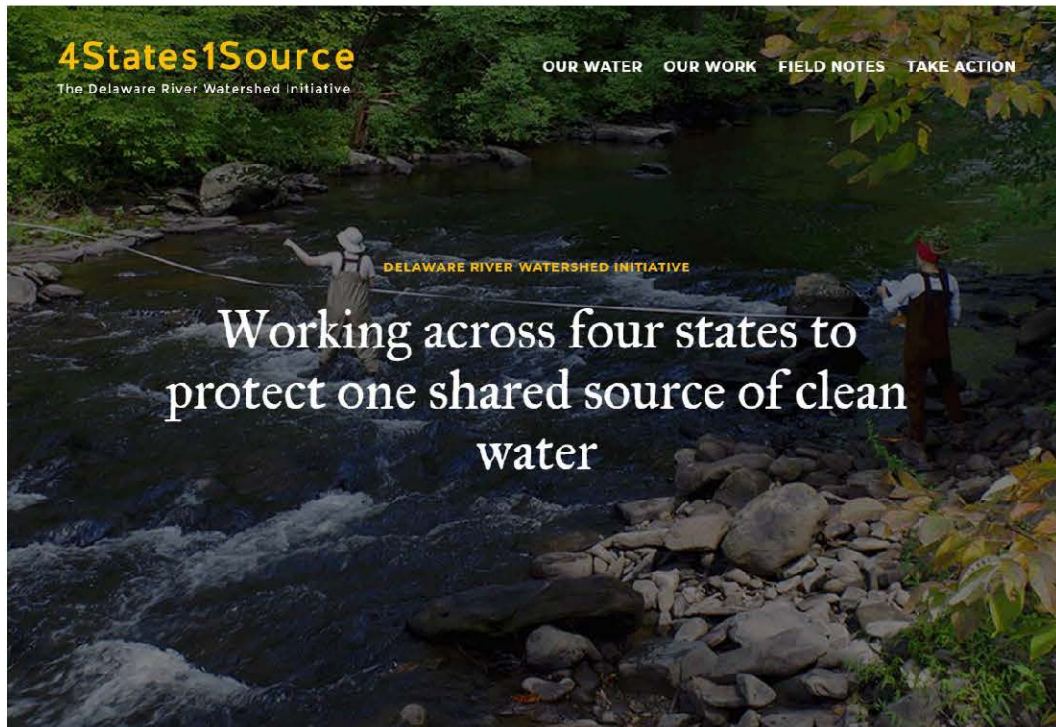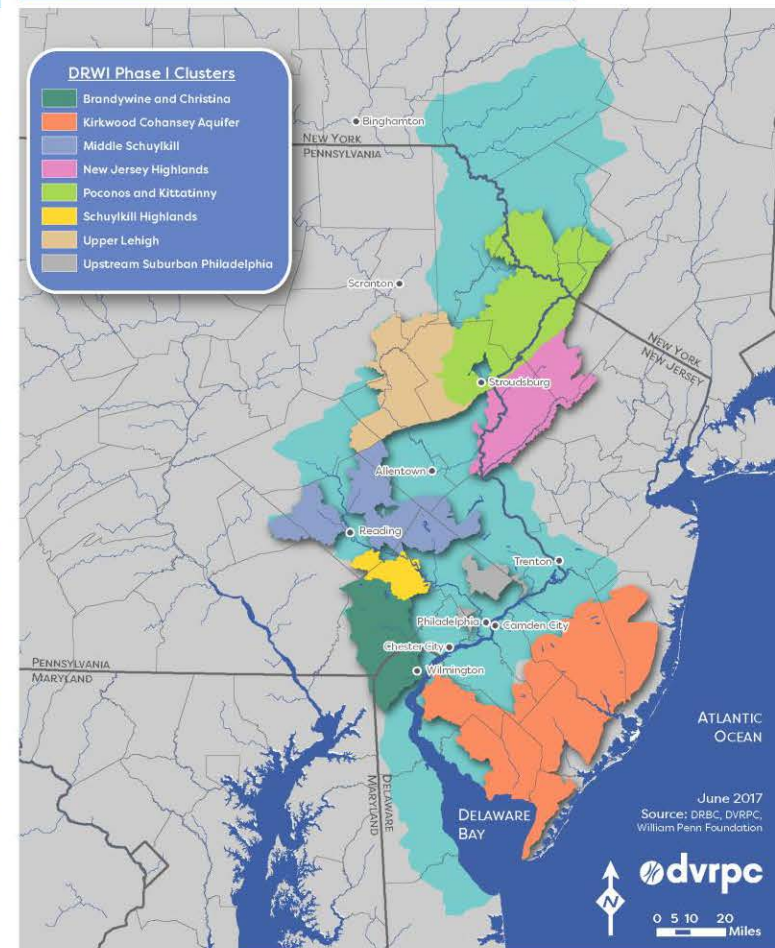# What is the DRWI Data, GIS, and Modeling Work Group?

Delaware River Watershed Initiative (DRWI)

www.4states1source.org

4States1Source
The Delaware River Watershed Initiative

OUR WATER   OUR WORK   FIELD NOTES   TAKE ACTION

DELAWARE RIVER WATERSHED INITIATIVE

Working across four states to protect one shared source of clean water

MAP: WILLIAM PENN FOUNDATION'S CLUSTERS

DRWI Phase I Clusters
- Brandywine and Christina
- Kirkwood Cohansey Aquifer
- Middle Schuylkill
- New Jersey Highlands
- Poconos and Kittatinny
- Schuylkill Highlands
- Upper Lehigh
- Upstream Suburban Philadelphia

June 2017
Source: DRBC, DVRPC, William Penn Foundation

*dvrpc

0 5 10   20
Miles

Work Group History

- Convened by Natural Lands in 2016

- Conducted survey of group in Dec 2016-Jan 2017

- DVRPC applied for WPF funding in July 2017

- Approved at WPF's November 2017 Board Meeting

- Approved by DVRPC's Board in December 2017

Work Group Purpose

- The group will:
  - prioritize data needs,
  - share knowledge,
  - expand capacity, and
  - collaborate to provide technical mapping, modeling, and spatial analysis assistance to the William Penn Foundation's Delaware River Watershed Initiative
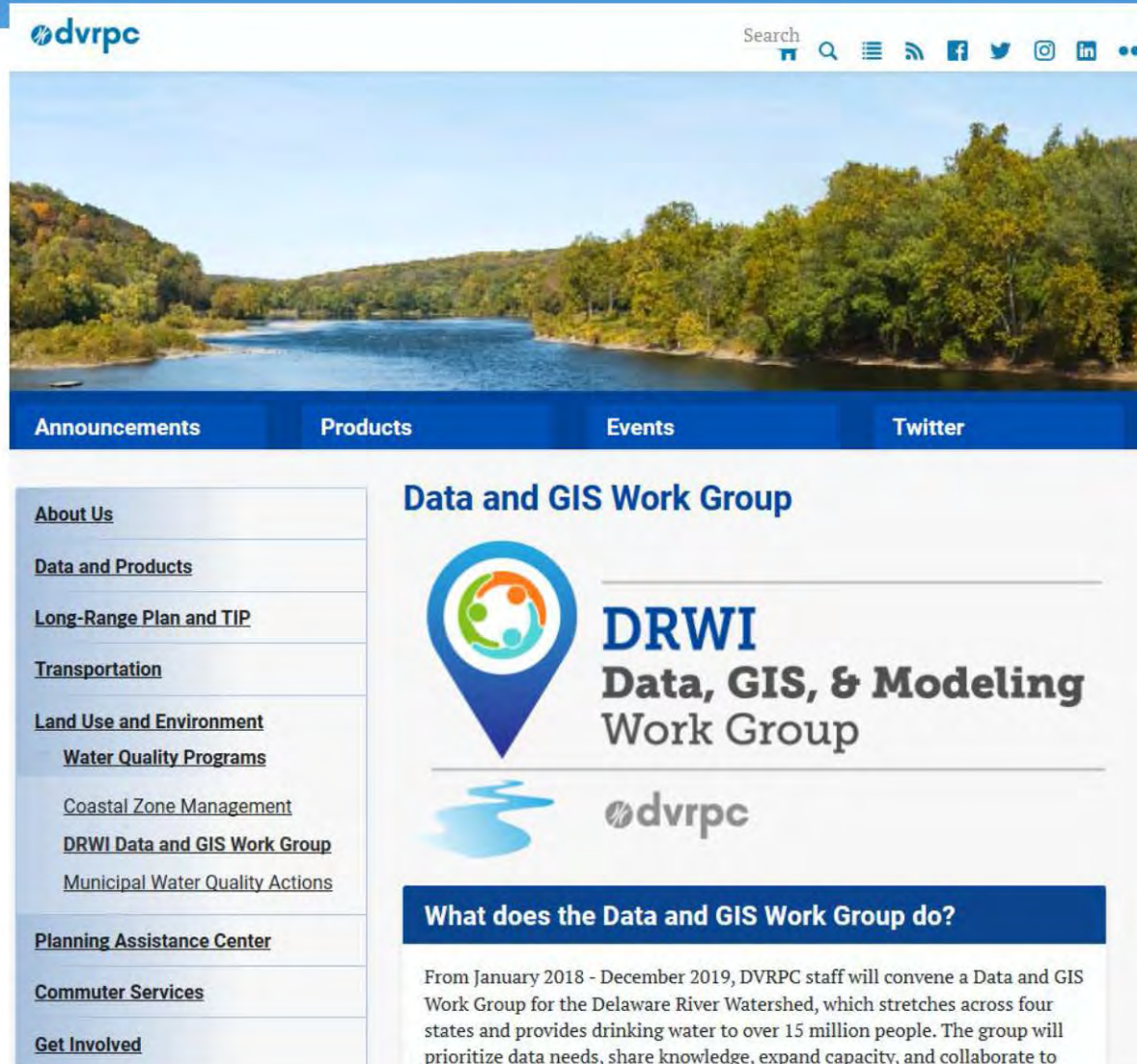
What will the DRWI Data/GIS/Modeling Work Group do?

- Meet up to **eight** times (some virtual)
- Host up to **four** educational webinars
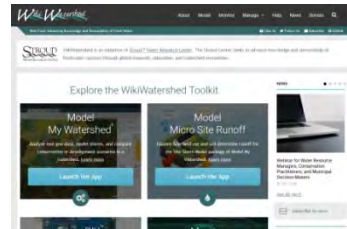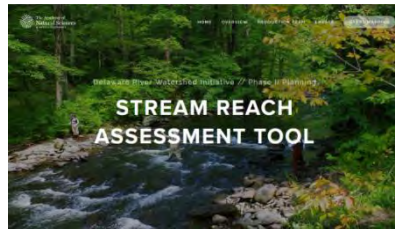
- Make maps for nonprofits doing work in the Delaware River Watershed
- Prioritize recommendations for additional Delaware River watershed data sets and/or modeling analysis, as well as future Work Group activity

https://www.dvrpc.org/waterquality/DataGIS/

Basecamp

www.basecamp.com

Stipends

Type	$ per meeting
Participating in Person	$175
Participating Virtually	$125

W-9 Form

- For non-governmental employees only

- **Social Security Number (SSN)** if the check should go to YOU

- **Employer Identification Number (EIN)** if the check should go to your EMPLOYER

- irs.gov/pub/irs-pdf/fw9.pdf

Form **W-9**
(Rev. November 2017)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the requester. Do not send to the IRS.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

Part I **Taxpayer Identification Number (TIN)**

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see How to get a TIN, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see What Name and Number To Give the Requester for guidelines on whose number to enter.

Social security number

or

Employer identification number

Part II **Certification**

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and

2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and

3. I am a U.S. citizen or other U.S. person (defined below); and

4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here

Signature of U.S. person ▶

Date ▶

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

Cat. No. 10231X

Form **W-9** (Rev. 11-2017)

Introductions

- Your Name
- Your Title
- Your Organization
- What excites you most about this group

Fact Sheet Review

Fact Sheet

DRWI Data/GIS/Modeling Fact Sheet

File Edit View Insert Format Data Tools Add-ons Help   Last edit was 3 days ago

Name of Resource

Name of Resource	Resource URL	Who created it?	What geographic area does it cover?	What subject area does it cover?	Audience	Type(s)
Pennsylvania Geospatial Data Clearinghouse	pasda.psu.edu	Penn State University	PA; Whole watershed	Search keyword "DRWI" for: watershed boundaries, county/municipality boundaries, rivers/creeks, national flood hazard layers, parks, PADEP data, soils, wetlands, Digital Elevation Models, high resolution land cover data, tree canopy	GIS professionals	GIS data download
Conservation Blueprint	http://www.njmap2.com/blueprint/	Nature Conservancy and New Jersey Conservation Foundation have teamed up with Rowan University and a consortium of 21 conservation-focused groups both governmental and non-profits	NJ	Water Quality priorities, Ecological priorities, Agricultural priorities, Community green space priorities	citizens, conservation practitioners, municipal decision-makers, researchers, educators, and students	Online tool
Delaware River Basin Land Use Dynamics	https://drbproject.org/	Center for Land Use and Sustainability at Shippensburg University	Whole watershed	High resolution land use/land cover mapping Forecast modeling land use/land cover change Long-term land use/land cover monitoring	GIS professionals	
WikiWatershed	https://wikiwatershed.org/	Stroud Water Research Center	Whole watershed	rapid visualization of watershed data, advanced geospatial analysis capabilities, and science-based predictions of human impacts on stormwater runoff and water quality	citizens, conservation practitioners, municipal decision-makers, researchers, educators, and students	Online tool
DRWI Mapper	http://www.ansp.org/research/environmental-research/projects/watershed-protection-program/where-we-work/	Academy of Natural Sciences of Drexel University	Locations of monitoring sites in 8 clusters	Monitoring sites	citizens, conservation practitioners, municipal decision-makers, researchers, educators, and students	
Stream Reach Assessment Tool (SRAT)	https://www.streamreachtools.org/	Academy of Natural Sciences of Drexel University	Whole watershed	APCAW Local Catchments (Pollutant yields by catchment) Total Catchments (Pollutant in-stream concentrations) Point Sources	GIS Professionals can download data directly; Regular users can view the Storymap: http://arcg.is/2jLQO1q	
DVRPC GIS Data Portal	https://www.dvrpc.org/Mapping/Data/	Delaware Valley Regional Planning Commission (DVRPC)	Greater Philadelphia Region (Bucks, Chester, Delaware, Montgomery, Philadelphia counties in PA; Burlington, Camden, Gloucester, and Mercer counties in NJ)	Boundaries, demographic data, planning data, structures data, transportation data	GIS professionals	GIS data download
eBird	https://ebird.org/home				citizens, conservation practitioners, researchers, educators, and students	Online tool
DRWI Parcel Data	https://natlands.org/drwi-parcel-data/	Natural Lands Trust	By county in DE, MD, NJ, NY, and PA	Parcels	GIS professionals	Mix of online viewer and data download

Example Fact Sheets

Pratt Center for Neighborhood Development

NEIGHBORHOOD DATA PORTAL

PRATT CENTER FOR COMMUNITY DEVELOPMENT

DATA SOURCES

Neighborhood Tabulation Areas
NYC Department of City Planning [Description] [Data]

Total Population
Total population in 2000 and 2010; Change in total population
U.S. Census Bureau; Census 2000, Census 2010 [Link]

Vacant Lots
Number and Area
PLUTO 2016, NYC Department of City Planning. [Link]

Schools
Elementary Schools, Middle and K8 Schools, High Schools, K12 Schools, Other School, All Schools
Selected Facilities and Program Sites, 2017 Release, NYC Department of City Planning [Link]

Crime data
New York City Police Department [Link]

Motor Vehicle Collisons
New York Police Department [Link]

School Capacity Data
Selected Facilities and Program Sites, 2017 Release, NYC Department of City Planning [Link]

Community Districts
New York City Department of City Planning [Link]

Median Household Income
B19013: MEDIAN HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS
Universe: Households
U.S. Census Bureau; 2015 American Community Survey 5-Year Estimates [Link]

Number of Households
DP02: SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Rent Burdened & Severely Rent Burdened Households
B25070: GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN THE PAST 12 MONTHS
Universe: Renter-occupied housing units
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Hispanic
B03002: HISPANIC OR LATINO ORIGIN BY RACE
Universe: Total population
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Asian
B03002: HISPANIC OR LATINO ORIGIN BY RACE
Universe: Total population
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Black
B03002: HISPANIC OR LATINO ORIGIN BY RACE
Universe: Total population
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent White Non Hispanic
B03002: HISPANIC OR LATINO ORIGIN BY RACE
Universe: Total Population
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Under 5 Years Old
B01001: SEX BY AGE
Universe: Total population
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent 5-19 Years Old
B01001: SEX BY AGE
Universe: Total population
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent 20-64 Years Old
B01001: SEX BY AGE
Universe: Total population
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Over 65 Years Old
B01001: SEX BY AGE
Universe: Total population
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Educational Attainment Less than a Diploma
B15003: EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER
Universe: Population 25 years and over
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Educational Attainment Less than a Bachelor's or Associate's Degree
B15003: EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER
Universe: Population 25 years and over
U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates [Link]

Percent Unemployment
B23025: EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OVER
Universe: Population 16 years and over
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Commute longer than 45 minutes
B08303: TRAVEL TIME TO WORK
Universe: Workers 16 years and over who did not work at home
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates [Link]

Parks larger than 8 acres
NYC Department of Parks and Recreation [Link]

Bike Lanes
NYC Department of Transportation [Link]

Truck Routes
NYC Department of City Planning [Link]

Job Locations and Number of Workers
U.S. Census Bureau, OnTheMap [Link]

Supermarkets over 10,000 Square Feet
ReferenceUSA Online Database [Link]

Commercial Uses
PLUTO 2016, NYC Department of City Planning [Link]

Vacant Lots
PLUTO 2016, NYC Department of City Planning [Link]

Remediation Sites
NYS Department of Environmental Conservation [Link]

Chemical Bulk Storage
NYS Department of Environmental Conservation [Link]

Sewer Backup and Street Flooding Data
311 Service Requests [Link]

ArcGIS Hub

http://strategic-plan-ral.opendata.arcgis.com/

Additional Resources

City of Raleigh Strategic Plan

FY2017 Year-End Performance Report

Community Survey Report

City of Raleigh Open Data

Interact and Learn

Apps provide simple access to information and tools for citizens to understand your community. We recommend exploring the apps below for helping engage around specific goals and initiatives - as well as encourage people to create their own stories and apps using the API and ready to configure apps.

New Parking App Can be Used at On-Street Meters Along Hillsborough Street.

The Special Events Office Coordinates Races, Events & Block Parties

Gigabit Fiber Construction in Raleigh

Interactive Transportation Project Map

ArcGIS Hub

https://planning-loudoungis.opendata.arcgis.com/

Chesapeake Conservancy

Feedback? Thoughts? Comments?

- What's more useful: digital or paper?
- Which examples do you like best?
  - Pratt: http://www.prattcenter.net/sites/default/files/ndp_data_sources_2017.pdf
  - ArcGIS Hub
  - Chesapeake Conservancy
  - Something else?
- Any datasets/resources that are missing?

Update on Help Desk

What types of maps/modeling will be requested?

- furthering and supporting implementation of the DRWI Phase 2 Cluster Plans

"Help Desk" Overview

DRWI organization submits request	DVRPC matches request with map maker	Map is made	Map is delivered	Map maker is paid

DVRPC emails map maker

Map maker confirms capacity

Map maker begins work

Map maker emails draft

Client reviews

Map maker makes final edits

Call for Submissions is out

TENTATIVE TIMELINE	
Call for Submissions Opens:	July 2, 2018
Deadline for Questions:	July 23, 2018, 1:00 PM EST
Deadline for Submissions:	July 27, 2018, 3:00 PM EST
Anticipated Selection of GIS professionals:	August 6-10, 2018

Help Desk Request Form is live!

- https://www.dvrpc.org/waterquality/DataGIS/
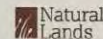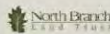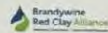
Who can ask for maps?

- anyone who is a member of the DRWI Basecamp group (~290 people)

- anyone who works for an *organization* that is represented on the DRWI Basecamp (even if that person is not a Basecamp member)

- organizations whose logos are shown on http://4states1source.org/about/#partners

Delaware River Watershed Initiative Partners
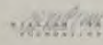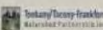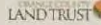
Updates from Work Group Members

Updates

- Anything you would like to share with the group?
  - Projects
  - Data Sets
  - Opportunities for coordination
  - Questions
  - Upcoming events of interest
  - Job Openings

Meeting Wrap Up & Evaluation

Meeting Evaluation

Evaluations

DRWI
DATA, GIS, & Modeling
Work Group

⊙dvrpc

Meeting Date: April 9, 2018

Help us find out what worked and what didn't work about today's meeting

1. **Please rate the overall quality of the Work Group meeting.**

	1	2	3	4	5	
Low quality	○	○	○	○	○	High quality

2. **Was the Work Group meeting a good use of your time?**

	1	2	3	4	5	
Not a valuable use of my time	○	○	○	○	○	Excellent use of my time

3. **What did you like best about the Work Group meeting?**

4. **What could have been improved about the Work Group meeting?**

5. **Do you have suggestions for the Work Group that would help us achieve the group's objectives?**

6. **Would you be able to attend a Work Group meeting on the following dates?**
   Check all that apply.

   _____ Monday, July 9, 2018
   _____ Friday, July 13, 2018
   _____ Monday, July 16, 2018
   _____ Monday, July 23, 2018
   _____ Tuesday, July 24, 2018
   _____ Tuesday, July 27, 2018

Please join us for lunch!

Thank you!

https://www.dvrpc.org/waterquality/DataGIS/

For more information, contact:

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carlt@dvrpc.org

215-238-2890