Innovations
Multi-District Team

"Don't wait for inspiration, build the foundation for it."

11 Districts, 27% of USACE, One Innovations Team

Entering calendar year 2020, we welcome two more USACE Districts, Vicksburg District and Rock Island District, and add two more new team members for Season 4. With these additions, our team has crossed an important threshold. We now have 27% of all USACE Districts involved and supporting our Multi-District Innovations Team. The goal is to have all USACE Districts working together for the same goal, innovating our agency. There are many exciting things happening for this Innovations Team. They are working on a lot of great Innovations, and our partners are giving us more help than ever. Thank you to everyone who has helped get the word out about this team, and I encourage you to continue to share innovations with other districts, divisions, and lake offices. As always, you are more than welcome to be part of the Innovations Team. All you need is Lake Office approval to fund your travel for three trips, one for our Innovations Summit, one for our 2nd Workshop at SWOSU, and then a 3rd Workshop in April. Please also check with your District as well to make sure they know you are participating.
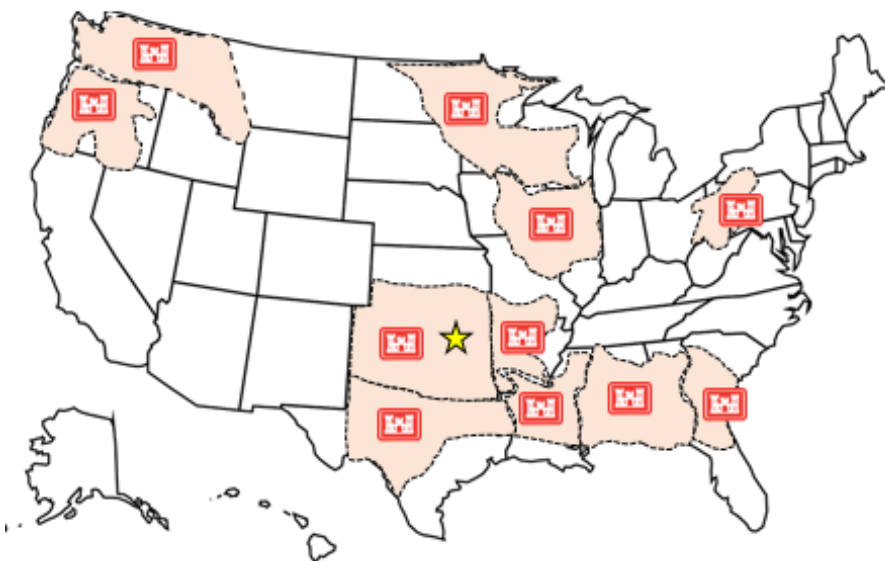
Tulsa - SWD
Fort Worth - SWD
Little Rock - SWD
Mobile - SAD
Savannah - SAD
St. Paul - MVD
Pittsburgh - LRD
Portland - NWD
Seattle - NWD
Vicksburg - MVD
Rock Island - MVD

2019 USACE Innovator of the Year: Sarah Noel

Sarah Noel, Park Ranger at Lake Texoma,   started on our Innovations Team in Season 2. After a year on the team learning how the team operates, she began down the path to her own innovative idea with USACE Bid Assist.   She noticed that the current process for contracting bids was clunky and often had to field calls from the members of the public who were confused by the process. So Sarah came up with a solution. She presented her idea at our Season 3 Innovations Summit in Edmond, OK. From there, the team voted her innovation into its workload, and she became Team Lead. Working with SWOSU students, a three-person USACE Innovations Subteam, and working with Contracting, she was able to get a working prototype up and running. Sarah also won two more awards, the Innovations Subteam Leadership Award and the Impact Innovator of the Year Award (Both internal team awards)

Sarah's award was presented to her by BG Paul Owen, Southwestern Division Commander, and COL Scott Preston, Tulsa District Commander.   Congratulations to Sarah, for winning the 2019 National Innovator of the Year Award.

Season 4: Fall Capstone Class Graduation

In December, the Fall Capstone Class held their Graduation Presentations. For our Innovations Subteam Leaders, this meant three prototypes had been developed. The Capstone Class, who were presented to in August and are the first Fall Capstone Class ever for the University, worked on our USACE Bid Assist Site, USACE Hunting App Mobile Site, and our USACE ARPA App. Combined, this class provided our Innovations Team with 1,892 volunteer hours worth approximately $49,000 in IT help. USACE Bid Assist and USACE Hunting Maps are set to launch from the Innovations store in FY 2020, while the USACE ARPA App will need one more semester for completion.

Season 4: Innovations Workshop #2

Hosted by Our Partners
Southwestern Oklahoma State University

Day 1: First Meeting with Students

The first day of our workshop brought new introductions as we had two new team members and two new districts that were added to our Innovations Team since October. With only an hour before the Capstone Class would come visit us, we covered as much team business as we could. Then, the subteams broke out into workshop mode, and we hosted the 27-student SWOSU Computer Science Capstone Class. The class split into five different teams and rotated around the ballroom and the breakout rooms visiting all the subteams. The students gave our subteams a lot of great feedback and insights.

Having the students present for the workshop was an enlightening experience that led to good discussions and opportunities for subteams to start recruiting students for their projects, but they were not our only visitors. Professor Karen Sweeney and other faculty got to come learn about our upcoming innovations and give their input. While the class only lasted one hour and 15 minutes, several students stayed with our subteams for most of the day, and two students stayed the entire day. The passion the students brought to the table with their ideas and solutions only fueled the passion of our Innovations Team members. With word getting out that the U.S. Army Corps of Engineers was on campus, we had several visitors from other departments, along with students and faculty. One of the students from the Parks and Recreation Department stopped by and even went to lunch with us to find out more about what we do. We hope these kinds of meetings will allow us to expand our partnership in the future, especially with the Parks and Recreation Department.

Day 2: Subteam Roundhouse

Our second day saw a roundhouse update on the progress of each innovation the team was working on. All subteam leads that were present for the workshop had to give a presentation on where their innovation is currently in the process and what the plan was for piloting the idea by May 1. Many were dependent on the help of the SWOSU Capstone class and were eager for Thursday when they would present to the class and the students would choose what they wanted to work on.

Subteam Presentations updates included:

- USACE Bid Assist (Completed)
- Electronic Citations (In the Works)
- Jr. Ranger App (Exploring App Builders)
- USACE Hunting Maps App (Expanding)
- ARPA App (More SWOSU Help Needed)
- Virtual Reality (SWOSU Help Needed)
- USACE Trails App (In the Works)
- USACE Volunteer App (SWOSU Help)
- Find Your Lake (SWOSU Help)
- Interpretive Contacts Counter (SWOSU Help)
- Project 2025 (In the Works)

After the roundtable and lunch, the team broke into some innovative discussions. The first was a presentation on the NAI Conference that Innovations Team Member Ryan Braaten attended. He gave a full account of the conference and what innovations were on display there. Next, Innovations Team Member Ben Williams gave a short run-through of the Mobile Districts Incident Center. Mobile District, to the team's knowledge, is the only USACE District with an online web-based incident center. Afterwards, the team began discussing and working on Project 2025. Our team is working on ideas that we can accomplish through innovation that will make the 250th Anniversary of USACE special. The ideas the team is currently considering will take some special help from USACE HQ and possibly some other USACE groups to complete.

Day 3: Student Selections

The third day of the workshop was by far the craziest day of them all. Sharply at 9:30 a.m., the first of five subteams began presenting to the 27 SWOSU Capstone students in hopes that the students would pick their innovation. You could almost cut the tension with a knife. The students had seen most of the innovations already and spent time with the subteams. Now, it was time to see if the personal contacts and the recruiting had paid off. Following the last presentation, Abby Jones (Co-Team Lead) got up to talk about what happens next. There were already students standing up, some taking baby steps towards the USACE Subteam Leaders standing in the corners of the room, like a runner in baseball getting a good lead off first base. Then Abby said "Go," and the students were everywhere. When the dust settled, there were high fives all around and more than enough excitement to fill the room.

USACE Volunteer App

Find Your Lake App

Virtual Reality

There were negotiations, as some of the teams did have to switch a student or two to have proper numbers on each team as decided by Professor Karen Sweeney of SWOSU. In the end, all parties involved were happy and ready to go to work on their projects. Now it is up to the USACE Subteam Leads to work with the SWOSU Capstone students and guide them, checking in with them at least every two weeks. Communication is always key, as the May 1st deadline draws near.

Interpretive Contacts Counter

ARPA (Cultural) App

Join Us for Upcoming Conferences:

(Month of February) Various Park Ranger Workshops

February is the month most USACE Districts are having their Park Ranger Workshops, NRM Workshops, or at least their VA Refresher Training. A couple of Districts who are not already part of the Multi-District have requested presentations from our Innovations Team. The Team is always willing, but this is usually a busy month for all parties involved. However, we will accommodate the best we can if your District has interest in an Innovations Team presentation.

(March) Public Lands Alliance, Arlington VA

The Public Lands Alliance is one of the best conferences that our team attends. It is a great place to talk about partnerships and innovations. All the federal agencies are represented there, along with the private sector and vendors who specialize in recreation. This year, our Innovations Team is presenting at their new morning sessions "Coffee and Case Studies" and so are our partners from Southwestern Oklahoma State University and the Corps Foundation. This is a useful conference for anyone to attend. If you are going, let us know so we can meet up as a USACE group!

(April) Interptech Conference, Monterey CA

This season will be our first time to attend this conference. It is put on by the California State Parks and NAI and focuses on technology and innovation in recreation. Some of the best tech for interpretation and recreation will be on display here. This conference is for anyone who is into recreation technology, not just Interpreters. Conference approval is needed for this one, so apply within your District/Division early. If you are heading that way, let us know so we can get the USACE group together.

(June) Partners Outdoors Conference, Washington, D.C.

One of the most influential conferences out there, Partners Outdoors showcases problems, challenges, and solutions to public lands issues using partnerships and innovation. This conference is also host to the annual Beacon and Legends Awards. All federal agencies attend this conference. It takes place in Washington, D.C., and all the major HQ personnel is there for each agency, along with others from Capital Hill. It is a great way to meet your HQ leadership and leadership from other agencies.

Innovations Store, Coming Soon:

Multi-District Innovations Store
Provided in part by The Corps Foundation

THE CORPS FOUNDATION
AMERICA'S LAKES AND WATERWAYS

| STORE | About the Innovations Team | Partners through Innovation | The Corps Foundation |

Innovations Community Only Resources:

Mobile Credit Card Machines

Self Service Day Use Parks

See all Apps in this Section.

Public External Resources:

Innovations Multi-District Team

USACE Jr. Ranger App

USACE Bid Assist

USACE HUNTING MAPS

See all Apps in this Section.

USACE Internal Resources:

PRMA PARK RANGER MOBILE APP
Test Drive Site
The Park Ranger Mobile App

RETS REAL ESTATE TRACKING SYSTEM STARTER

Self-Service Campgrounds
New Way to Pay!

VERS Portal

See all Apps in this Section.

Coming Soon/In the Works:

Electronic Citations

Find Your Lake

Preserving Our Nation's Past
USACE ARPA APP

USACE VR/AR TEAM

See all Apps in this Section.

Welcome to the newest addition to USACE Innovations, our very own Multi-District Innovations Store!   All of our completed innovations are on this site. There are multiple categories and different resources that everyone may or may not have access to:

· **Innovations Community Only Resources**, this section is just for Districts who are part of the Multi-District Innovations Team and send Team Members from their Districts.

· **Public External Resources**, everyone including the general public will have access to these resources.

· **USACE Internal Resources** will be for ALL USACE Employees no matter the District, no public access.

· **Coming Soon/In the Works Resources** just shows what is coming down the pipeline in Innovations.

How do I access the Innovations Store? Visit The Corps Foundation's Website and look for "Innovations" to enter the store. Special thanks for The Corps Foundation for hosting the site.

USACE Hunting Maps App (Expansion)

With Fort Worth District leading the charge on this innovation, we are ready for expansion into other Districts. All you need to do is put your Hunting Maps on Arc GIS Online and make them interactive like the ones that are already on there. Use Fort Worth as a reference or contact the Innovations Team, and we can show you how to replicate. Right now, our goal is to have all Hunting Maps tied into one app to help hunters to find the resources they need. The USACE Hunting Maps App is free. Let us know if your lake or District would like to be a part of this important innovation.

Innovations Team App

Yes, our team does have an app. No its not on the Google Play or Itunes Store. This app will be readily available on our new Multi-District Innovations Store as soon as it opens this spring. Keep up to date with where the team is going, what the team has done, and who is on the team. This App is packed with lots of resources that you will want to have on your phone and that will help keep you in the know.

Jr. Ranger App

Calling all interpretive-minded Park Rangers. Right now, your Lake Office can be a part of the Jr. Ranger App. We are currently about to close on a contractor to build this innovation for us. The first 10 Lakes that join will be included in the initial cost and won't have to pay anything. We do not know yet what it will cost after those initial 10, so now is the time to get in the program. All you need is four interpretive programs specific to your Lake Office. We are currently working on a sponsor for the badges, but it helps to know who all is in. So let us know if you would like to be part of this rising program.

Next and Final Workshop for Season 4

It's hard to believe we are talking about our final Innovations Workshop of the year, but it is just around the corner. One of the best lakes to visit in the spring has agreed to host us—next stop, Lake Ouachita, AR. We hope to take an Innovations tour around Lake Ouachita as well. More to come as the agenda gets finalized. We are set for April 13th-17th, will you be there?

Team Evaluation

Innovations Program
Value sheet

nnovations
Multi-District Team

Completed Innovations:　　　　**Cost Savings:**　　　**Added Value:**

Self-service Day Use Machines:
- SAD Model shows around ~$100,000/year
- ~$75,000 per machine, (-) ~$5,000/year fee
- ~$70,000 (x) 1 machine per lake (x) 36
- No more pulling vaults.
- Avg 1 day (x) 2 FTE's (2) Avg. 3 hours counting and processing, (x) 36 Lakes
- No more lengthy and complicated audits

~ **$2,520,000 / year**

~ **$1,044,014 / year**
~ **(41,184 hours)**

Priceless!

Self-service Camping:
- No need for Park Attendant Contracts
- $$$ for contracts from District (36 Lakes)
- Labor spent on solicitations and draft
- 15 hrs (x) GS-09 Avg ($25.35), (x) 36 Lakes
- Avg. cost to set up campground in QR Codes is around $50.00.
- See "Self Service Day Machines" estimate for no more Vaults and easier Audits.

~ **$800,000 / year**

~ **$13,689 (540 hours)**

Park Ranger Mobile App:
- ~ 25 hours per year not having to hunt for information, but having it on their phones readily available (x) Avg. 3 Rangers (x) $25.35 (x) 36 Lakes
- (App Includes GIS Mapping, Brochures, policies, Flood Info, etc)

~ **$68,445**
(2,700 hours)

RETS Starter:
- Internal System to assist in creating RE Packages for Field EE's.
- ~ 20 hours per new EE (x) 3/per year/per project in teaching RETS process (x) 36 Lakes
- ~ 20 hours per year for each experienced Ranger (x) 3 per project to input through Advanced settings with all info in one place/per year/per project (x) 36 Lakes

~ **$54,756**
(2,160 hours)

~ **$54,756**
(2,160 hours)

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	Cost Savings:	Added Value:

Mobile Credit Cards/Point of Sale Items:
- For Lake Offices and Boat Shows for Annual Pass and ATB Pass Sales.
- New options for our customers, no more cash.
- No more cash to carry out at Boat Shows in dark parking lots.
- Extra passes sold due to CC only
- Counting Cash from Boat Shows/Events:
  - 2 FTE's (x) 4 hours plus processing time (x) 3 times per year (x) 12 projects

Added Value:
Better Customer Service.

Park Ranger Safety

Cost Savings: ~ $7,300 (288 hours)

Continued Innovations from Season 3:

USACE Bid Assist:
- Assist public in submitting bids.
- Phone Calls, Walk through, explanations.
- 1 Ranger (x) 5 days per year (x) 36 lakes

~ $36,504 (1440 hours)

USACE Hunting App:
- One stop shop for interactive maps and USACE Hunting resources. No more printed maps.
- 1,000 maps (x) Printed maps cost?? (x) 36 Lakes (**Guess**)

~$100,000

Hunters can now use interactive maps resolving questions.

Jr. Ranger App:
- 5+ hours of Interpretive use/per user.
- ~ 500 users per year (x) 10 projects participating (x) 5 hours of use
- Added benefit to public, enhanced recreational opportunity.

~ $633,750 (25,000 hours)

Electronic Citations:
- Hours calling local LE to obtain same info:
- 15 hrs/ per year (x) 3 Rangers (x) 36 Lakes
- Hours preparing citations for mail (Old Way):
- 25 hrs/ per year (x) 36 Lakes
- Ability to run names and tags through database. Geo-reference citations for hot spots. Clean electronic readable citations that go straight through CVB.

~ $41,067 (1620 hours)

~ $22,815 (900 hours)

Ease of use and less frustration.

Park Ranger Safety

	Cost Savings:	**Added Value:**

New Innovations for Season 4:

Self-service Day Use Fee Management:
- No Fee Machines
- 2 Machines per project ($12,000) (x) 36 (+)
- Service Fees ($2,000/year) (x) 36
- No Vaults or Audits
- 3 PR x 28 hrs x 52 wks x 32 Lakes
- Free to set up, Free to use, no cost what-so-ever. (Vs Machine Contracts)

~ $864,000

~ $3,543,321
(139,776 hours)

Nearly eliminates the burden of the Rec-Fee Program.

ARPA App:
- Much easier for Cultural Inspections for compliance of ARPA.
- ~ 15 hours/per year/ranger Avg. 3 (x) 36 as most inspections are done while already in the field and no paperwork due to the App.

~ $46,067
(1620 hours)

Volunteer App:
- Post job opportunities, One stop shop for program, Post photos, Events, etc.
- ~ 15 hours/per year/ranger Avg. 3 (x) 36

~ $46,067
(1620 hours)

USACE Trails App:
- EMS mapping assistance for emergencies and accidents.
- Printed maps no longer needed. Price of printed maps?? (x) Lake Offices 36. (Guess)

~$100,000

Interactive Mapping, better customer experience.

Interpretive Contacts Counter:
- No more guesswork for OMBIL Season.
- Tracks each ranger's contacts and events.
- 5 hours/project (x) 3 rangers (x) 36 projects

Less frustration for workforce.

~$13,689
(540 hours)

Virtual Reality for Boat Shows and Visitor Centers:
- New recreational opportunity for the public.
- Boosts larger WS numbers for WS program at Boat Shows and Events.
- Average cost of VR $1,300 per minute.
- 5 videos/10 minutes/$1,300 Base

$65,000

Reaching new demographics and sparking new interest in the Corps.

Find Your Lake App:
- No more need for Corps Lakes CD Less printed materials
- Increase in Visitation/revenue
- Increase in Volunteers from finding Lakes.

Unknown at this time.

Program Highlights:

	Cost Savings:	Added Value:
Total Hours in Corps Labor:	~ 190,068 hours	~ 31,480 hours
Total $$$ Value of Innovation:	~ $6,733,533	~ $3,328,018

Note, all numbers above are calculated with a 36-38 Lake District to show full possible effect. The numbers are guestimates by combining cost of equipment, GS-09 Park Ranger Labor, and other relative measures. These numbers are estimates and only present to help quantify the effects of the Innovations products. Numbers are just for one district if they are utilizing all Innovations, for full 11 District impact, multiply by 10.

Workshop Outtakes and Action Photos

Multi-District Innovation Team Map

The Multi-District Innovations Team currently has team members from the following Districts:

- Tulsa District **(SWD)**
- Fort Worth District **(SWD)**
- Portland District **(NWD)**
- Mobile District **(SAD)**
- Savannah District **(SAD)**

- Pittsburgh District **(LRD)**
- Little Rock District **(SWD)**
- Saint Paul District **(MVD)**
- Seattle District **(NWD)**
- Vicksburg District **(MVD)**
- Rock Island District **(MVD)**
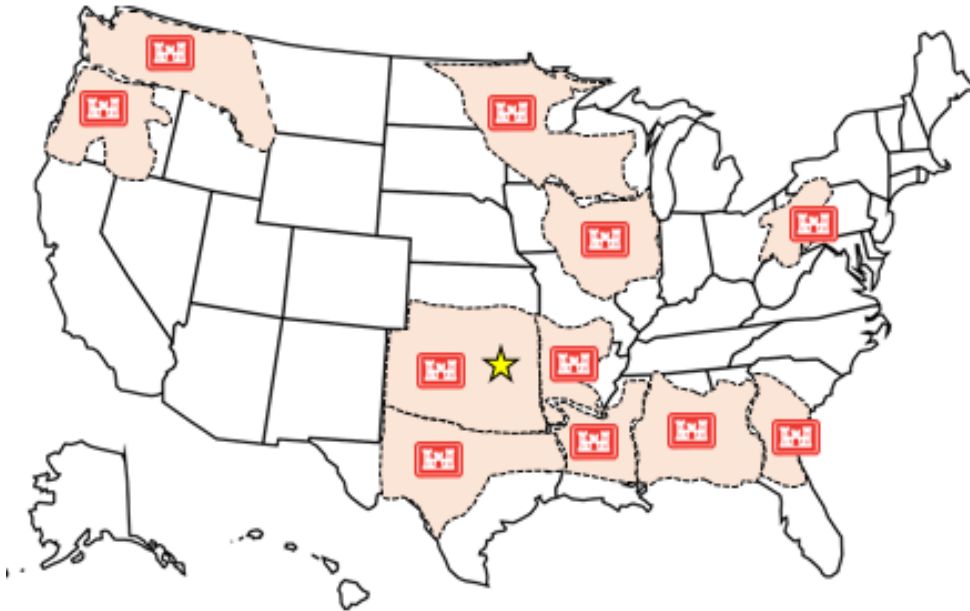
Want more info?
Remember, you can always follow the team's progress and current happenings at:

https://wiki.usace.army.mil/Innovations

Special Thanks to Our Partners!

We wanted to say a special "Thank You" to our Innovations Team partners. Many of the innovations we have today, and those we are currently working on, would not be possible without these awesome partners. Thanks again for your continued support!