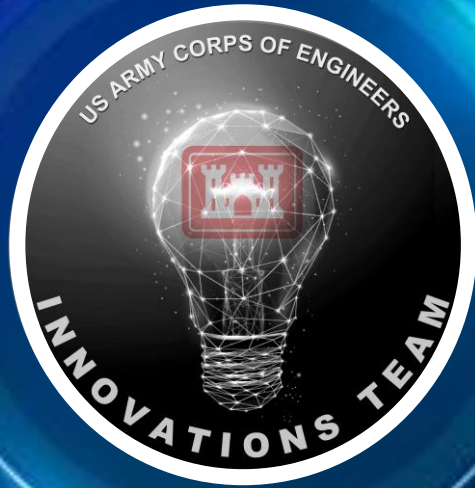


# USACE NATIONAL NRM INNOVATIONS TEAM



**11.17.22**

An Hour to Innovate

Hosts: Jason Knight & Abby Jones

Smartphone Scan



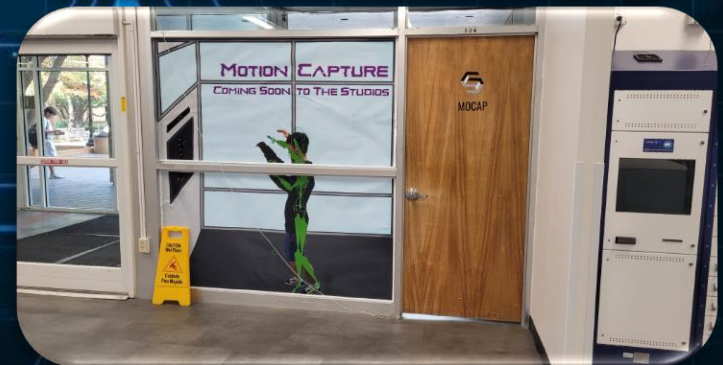
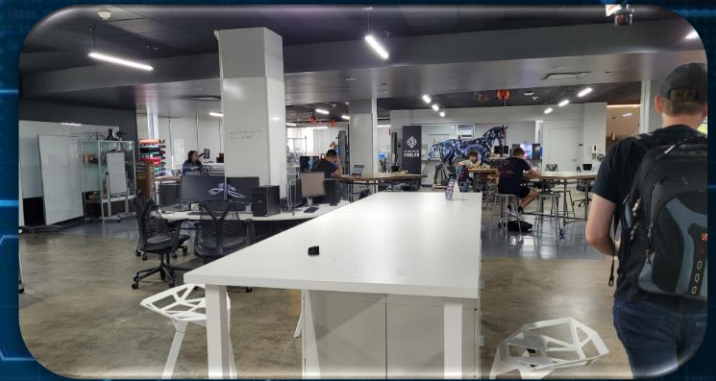
Individual Districts will be responsible for paying employee labor while participating in this call.

# New Partnerships: University of Texas, Arlington



- Capstone Classes = 1 Year
- 6 to 13 Classes per Semester
- U funding up to \$800 per project
- Labs for every building scenario:
  - Computer Lab
  - Drone/Ariel Lab
  - Machine Lab
  - Fabrication Lab
  - Woodworking Lab
  - Robotics Lab

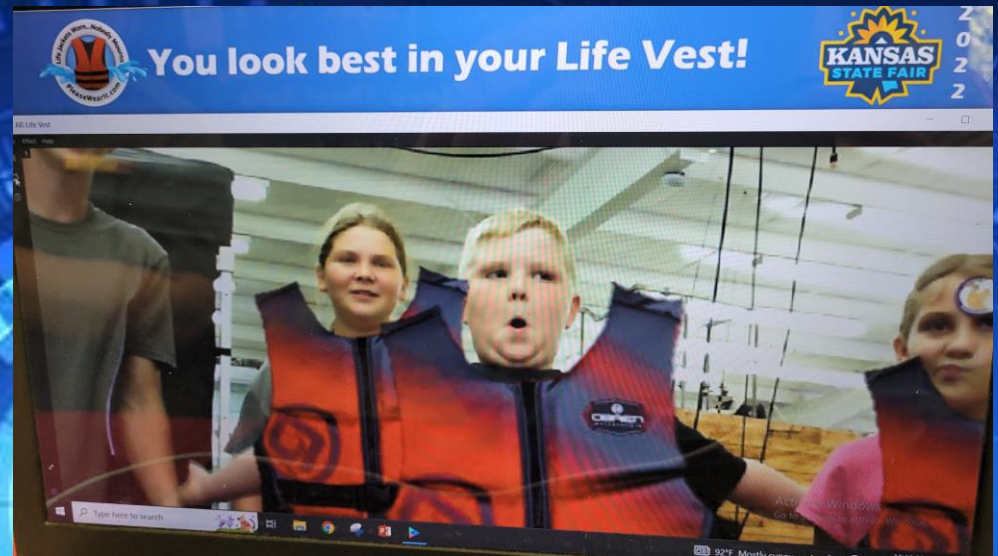
Smartphone Scan



# Season 6 Pilot Reviews (May – August):

## Augmented Reality Live Screen:

- Kansas State Fair (September)
- Over 40,000 attended
- Big Hit with the public
- Copy to Pam for WS Expansion



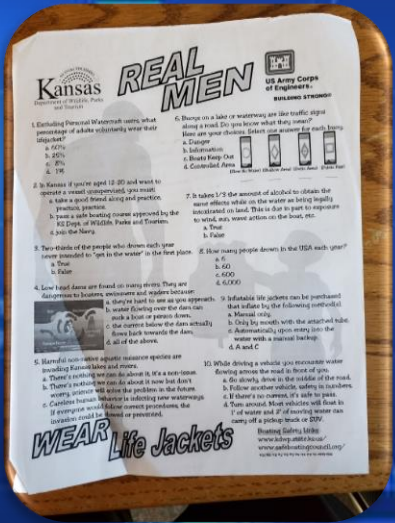
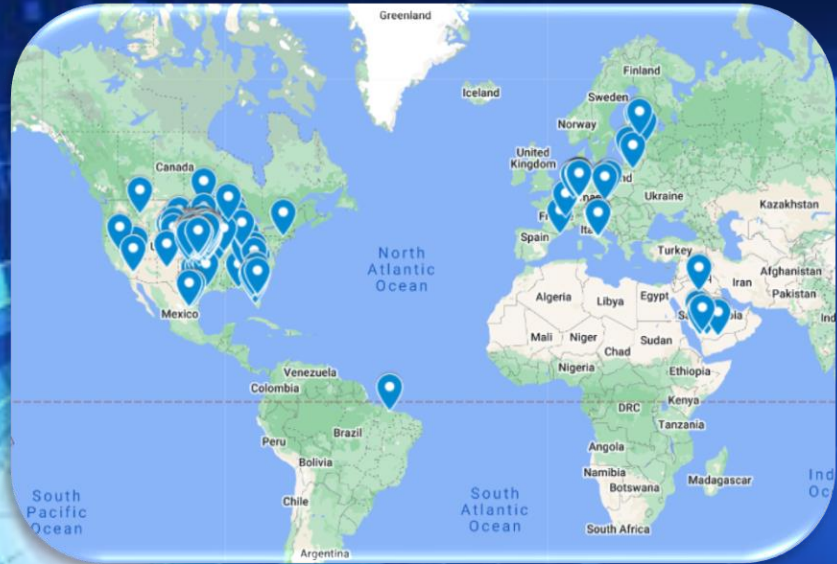
Smartphone Scan



# Season 6 Pilot Reviews (May – August):

## Digital Guestbooks for Visitor Centers:

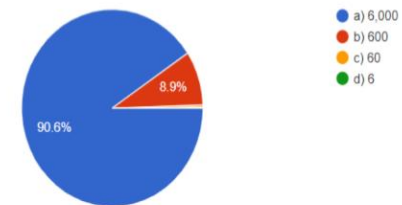
- Organizes your Water Safety Efforts/Counts
- Shows what public you are reaching
- Level of WS Education.
- Ability to give feedback/questions



Scan QR Code for:  
**Water Safety Quiz**

3) How many people drown in the USA each year?

596 responses



Smartphone Scan



# Season 6 Pilot Reviews (May – August):

## Interpretive Contacts Counter:

- Prototype Complete
- Good working tool for Android
- Invest money to clean up App and expand to Apple?
- Will be out there for anyone to utilize.



## USACE Contact Counter

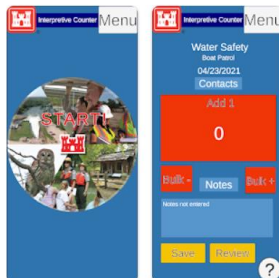
The Corps of Engineers Foundation

50+ Downloads  
Everyone

Install

Add to wishlist

This app is available for all of your devices



Developer contact

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# Season 7 Innovations Summit (Sept)

## Pittsburgh, PA

### Season 7 Team Kickoff:

- Currently 40 Team Members
  - 11 in-person
  - 18 virtually
  - 11 Schedule Conflicts
- Innovations Tour
- Innovations Guest Speakers
  - Agents of Discovery
- 8 New Innovations presented.
- Added top 4 Innovations to Team Workload.
- Workshop #1 underway.



### Experiencing a New Normal with Augmented Reality (AR)

by Agents of Discovery

Your adventure is about to begin!



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# New Innovations for Season 7

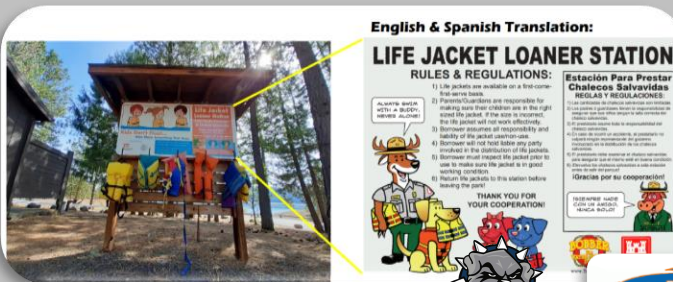
## Augmented Reality Floor Projections



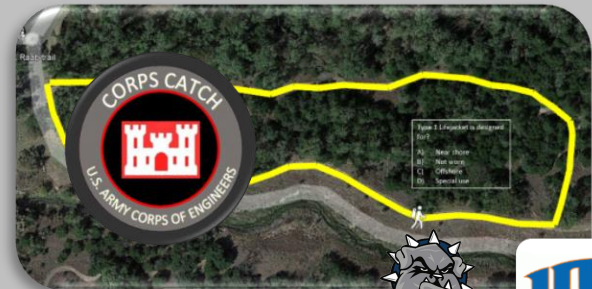
## In-Park Emergency Stations



## Sign Translator Tool



## USACE Game "Corps Catch"



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# FALL Capstone Presentations:

## Southwestern Oklahoma State:

- USACE Game, Corps Catch
- Sign Interpreter Tool
- AR Floor projections
- AR/VR 360 App



## University of Texas, Arlington:

- Augmented Reality Floor Projections
- AR/VR 360 App
- Sign Translator Tool
- USACE Corps Catch Game
- Park Ranger Holograms



\*\*\* All Innovations were picked up by the Student Teams at both Universities and are working on them with our Innovations Sub Teams.

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# Continued Innovations

## USACE Lake Widget



Lake Levels/Water Data and more right on your Smartphone home screen. SWOSU & ESU fell short of delivering a prototype.

## Virtual Reality 360 App



Revamping App  
Adding 9+ new videos  
Missing 360 videos from other projects around USACE.



## USACE Volunteer App



Working with PAC Team on this App.  
Training, AHA's, Hours, Opportunities, and more.

## Hologram Rangers

Hoping to cover all R&D costs on this one at \$800.  
UTA already working on this one to make it a reality.



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# Continued Innovations (page 2)

## Corps Marketplace



Working with Logistics Management on their site. Current version is Share point, trying to move to develop Web based site.

## Self Reporting Traffic Meters

- Both Batch testing and conditional testing.
- 4 pilot locations (3 Tulsa, 1 Mobile)
- Setting close to matching Diamond TC.
- One more batch study in Atlanta in December.
- Monit: Inductive Loops research.



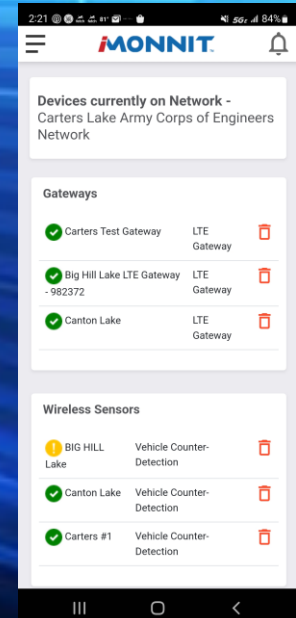
Day: 4-5-22 Tuesday Parent  
 Time: 4:12  
 Scenario: Single Car

Monit = Rear = 1 (1) 3 (3) 4 (4) 5 (5)  
 Delay = 1 (1) 2 (2) 3 (3) 4 (4) 5 (5)  
 Axle = 1 (1) 2 (2) 3 (3) 4 (4) 5 (5)

VS  
 Presume Monit Diamond Joint TC 1 IC = High  
 Increment (cont) = 1 (Scale = 1 count)

Mph	Count	8 H A	Can	Cont
5	2 -	(4:12)	100	10
10	2 -	(4:13)		
15	2 -	(4:14)		
20	2 -	(4:15)		
25	2 -	(4:16)		
30	2 -	(4:17)		
35	2 -	(4:18)		
40	2 -	(4:19)		
45	2 -	(4:19)		
50	2 -	(4:20)		

PERFECT!



Smartphone Scan



# Innovations that need a push...

## Parks and Recreation Comment System (PARCS)



White Paper Stuck in Office of Council HQ. Have not agreed to follow-up meeting.

## Caching Wildlife



Already built for 3 Lake Offices. GIS HQ will not allow for us to the public for prototype. No Pii nor Classified Info.



Working with the Office of History USACE on this one. Have several ideas and will help on HQ's ideas as well/necessary.



**Find your Lake/Park Passport App**



**250<sup>th</sup> Ann. Lapel Pin**



**250<sup>th</sup> Ann. Special Edition Badge**



**New Annual Pass Design for 250<sup>th</sup>.**



**Traveling Truck w/ VR/AR Capabilities.**



# Coming up soon:

- **December 16, 2022** = SWOSU Fall Class Presentations to Team.
- **January 10-12, 2023** = Innovations Workshop #2 Hosted by our Partners at SWOSU (Spring Class)
- **January 19, 2023** = Innovations Presentations to ESU and their Spring Semester Capstone + UTA Spring Senior Design Classes
- **February 29 – March 3, 2023** = National Public Lands Alliance Conference (Portland, OR)

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# A new Innovations twist?

## Visitor Center Innovations Alliance

**Directive:** To make sure that all USACE Visitor Centers and Interpretation Centers across the nation have access to the technologies we build in Innovations, we are building the VCIA.

- Begins as a distribution list to all Visitor Centers and Interpreters that would like to be included. Our team is currently reaching out to build that list.
- Have three, 59-minute Virtual meeting per year. All three meeting coincide with the Innovations Team Workshops.
- The Goal is to talk Innovations & Technology (Policy, what's new, what are VC's working on now, plans for future, where do they need help in technology).
- The VCIA will at no time talk about Budgets, Staffing, Labor and hours, etc. Our focus is Innovations and Technology only.
- Mock Meeting Agenda:
  - 15 minutes: Virtual tour of local Visitor Center (Take Turns each meeting).
  - 15 minutes: New products from the Innovations Team.
  - 10 Minutes: What new tech are Visitor Centers creating/planning? Can our Partners help build what you need?
  - 10 Minutes: What would you like to see the Innovations Team build?
  - 9 Minutes: Any other Q&A.

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# Innovations you can use now:

(Fee Options)



Scan QR Code at Park entrance or at the Site. No cash, all Credit Card option. Utilize the R1S option as well on this.



Ventek Machines, automated fee machines. Takes cash, coin, and credit cards. Many bought these with the CARES Act funding a while back.



Gives the ability to see Annual Passes at boat shows and events and avoiding cash. Can be used in front office as well.



100% Free Option through Pay.gov. 100% no touch, 100% paperless. Payment form for the public, secure App for the Rangers to use.

Smartphone Scan



# Innovations you can use now:

(Completed Innovations)



Prototype Complete. Complete GIS System, w/o ordering feature. SAWG modeling new system after the Prototype.



10 + Lakes across USACE involved in this Innovation. Recently added to the Apple Store, plus Google Play Store. Accepting new Lakes.



30 + Lakes and growing. One stop shop for GIS Hunting Maps for the Public to access. Accepting new Lakes.



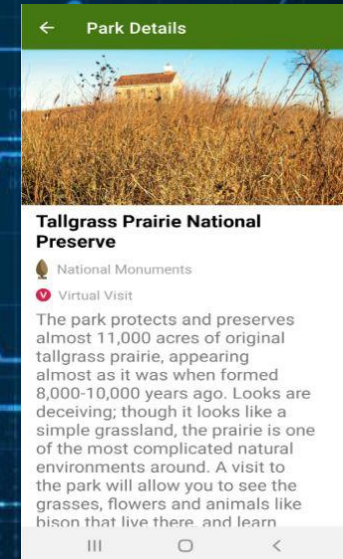
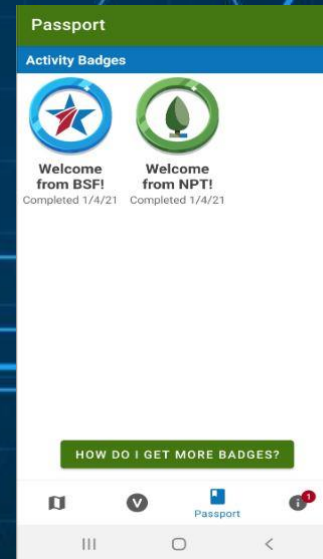
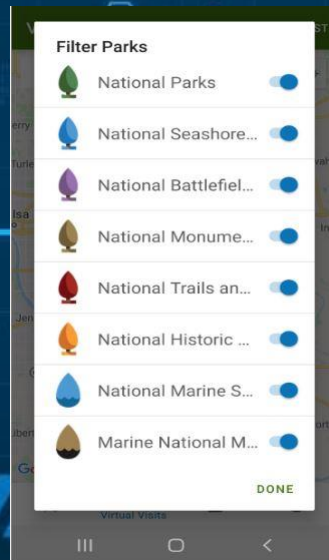
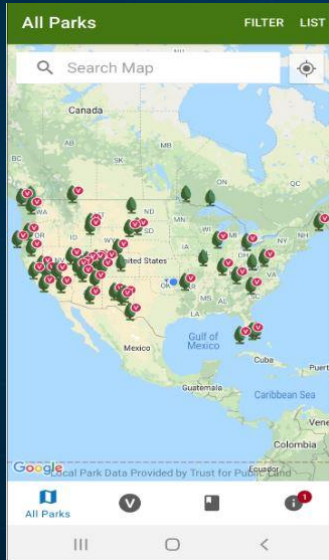
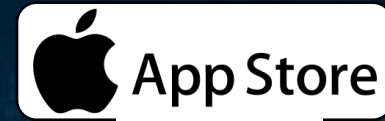
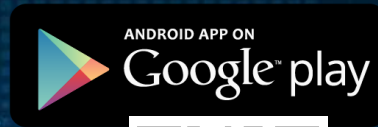
## Innovations Store

Made possible in partnership with The Corps Foundation

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# National Passport App



Smartphone Scan

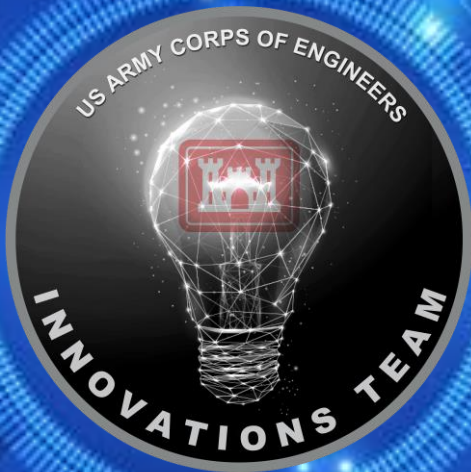


- Make the public aware
- On all the Play stores for download
- Check your data, add photos, and other features.





## USACE NATIONAL NRM INNOVATIONS TEAM



Roseanna Burick	HQ USACE Proponent
Jason Knight	(SWT) –Indefinite
Abby Jones	(SWT) – At Large
Andrew Ray	(MVS) – At Large
Francesca Gillion	NAD Representative
Nicole Govan	LRD Representative
<b>Vacant</b>	SAD Representative
Shawna Polen	MVD Representative
Brooke Thomason	SWD Representative
Carla Robinson	SPD Representative
Andrew Huddleston	NWD Representative
Jill Davis-Belanger	POD Representative

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**Questions?**

**Need More information?**

**?**

