

CATCHING A “UNICORN:”

USING PUBLIC, PRIVATE AND NONPROFIT
PARTNERSHIPS TO HELP TACKLE AIS



COLUMBIA RIVER BASIN TEAM MEETING

June 6, 2018

Edgar Rudberg, Ph.D.
Mark Apfelbacher, MLA

**CLEAN
DRAIN
INITIATIVE**



2017 Pilot Results



\$146B

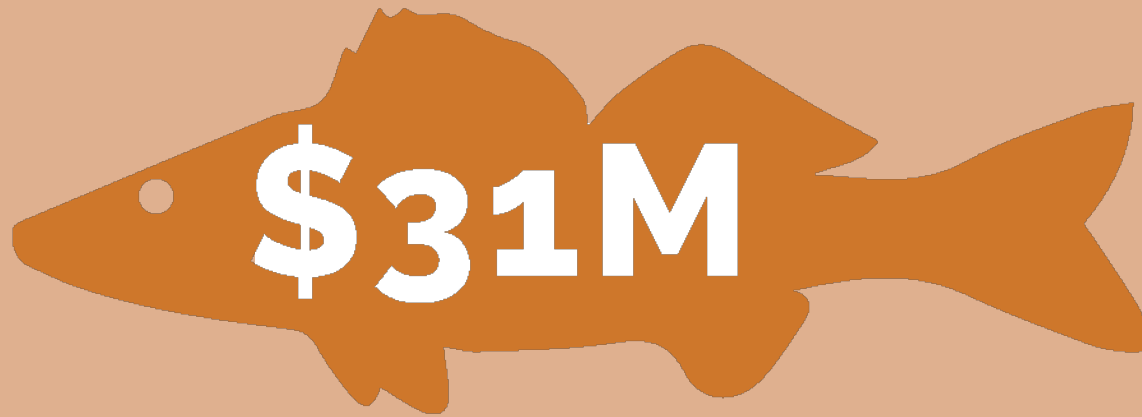
Invasive
Species
Cost to
U.S./ year



Over
36,000
Public
Boat
Launches

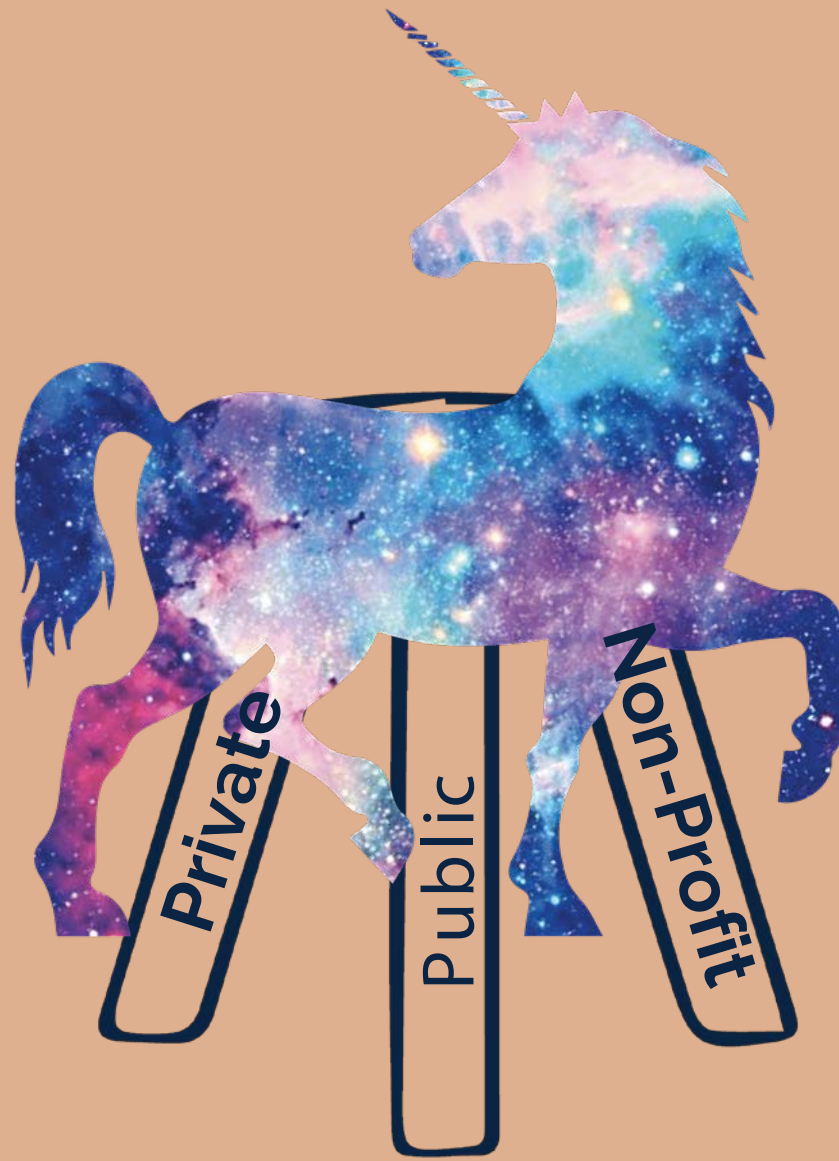


Existing
solutions
are costly
& cannot
scale



1 County
1 Fishing season lost
1 Lake

zebra mussels & spiny water flea



Public



- Science
- Outreach & education
- Participation

Private



- Vision
- Execution
- Stakeholder input

Non-Profit



- Bridge builder
- Outreach & education
- Advocates

CLEAN.DRAIN.DRY.

BOATS, TRAILERS & GEAR
STOP INVASIVE SPECIES



STOP AQUATIC
HITCHHIKERS!



www.CleanDrainDry.org



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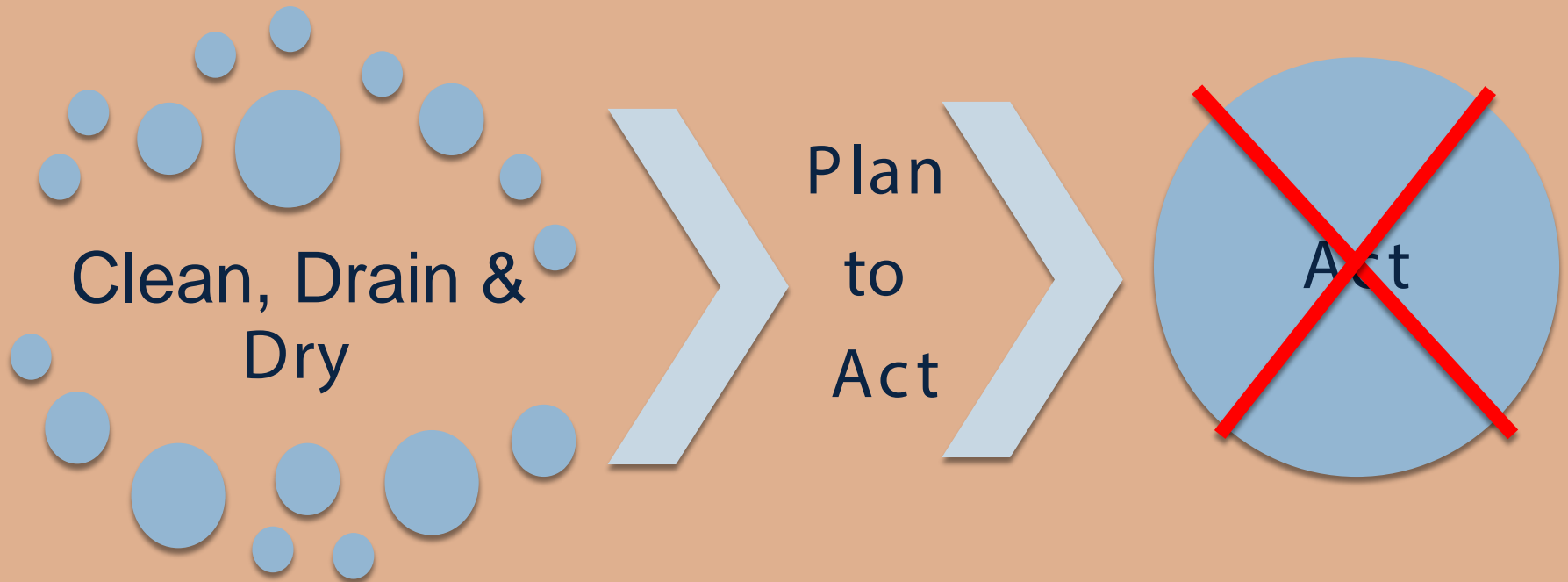
- Consistent science based messaging
- Coordinated outreach
- Full service marketing / media (CBSM)
- Education program

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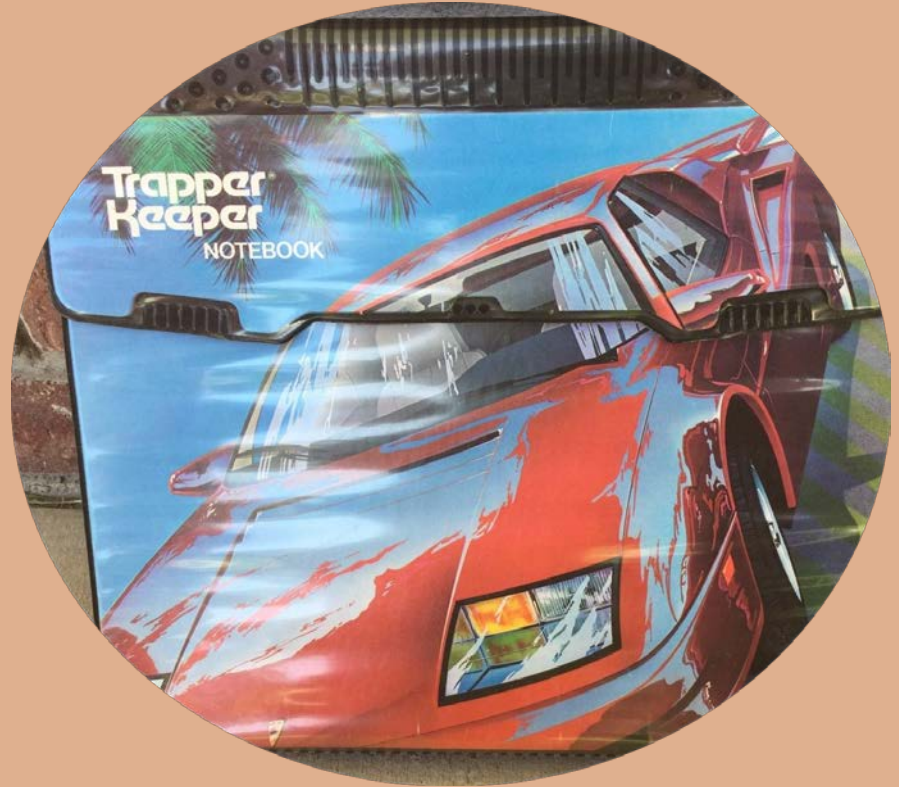
Wildlife Forever

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My first car... not a Ferrari

- High brand value
- All the cool kids are doing it
- Barriers



CFL Recycling

- Low recycle rates
- Centralized drop off
- All the cool kids are not doing it



FL Fish and Wildlife

- Visual ID
- Shoot
- Cook
- Eat





Pressure Washers



- High cost
- Staffed
- Water catchment

Staffed Inspection



- Ongoing cost
- Difficult to recruit
- Manage staff

No Resources



- No tools for BMPs
- AIS spread
- Open access at risk



Survey says...“Give me the **TOOLS**”

Non-Profit Partners



Pilot Sponsors



Public Support



Minnesota Pollution
Control Agency

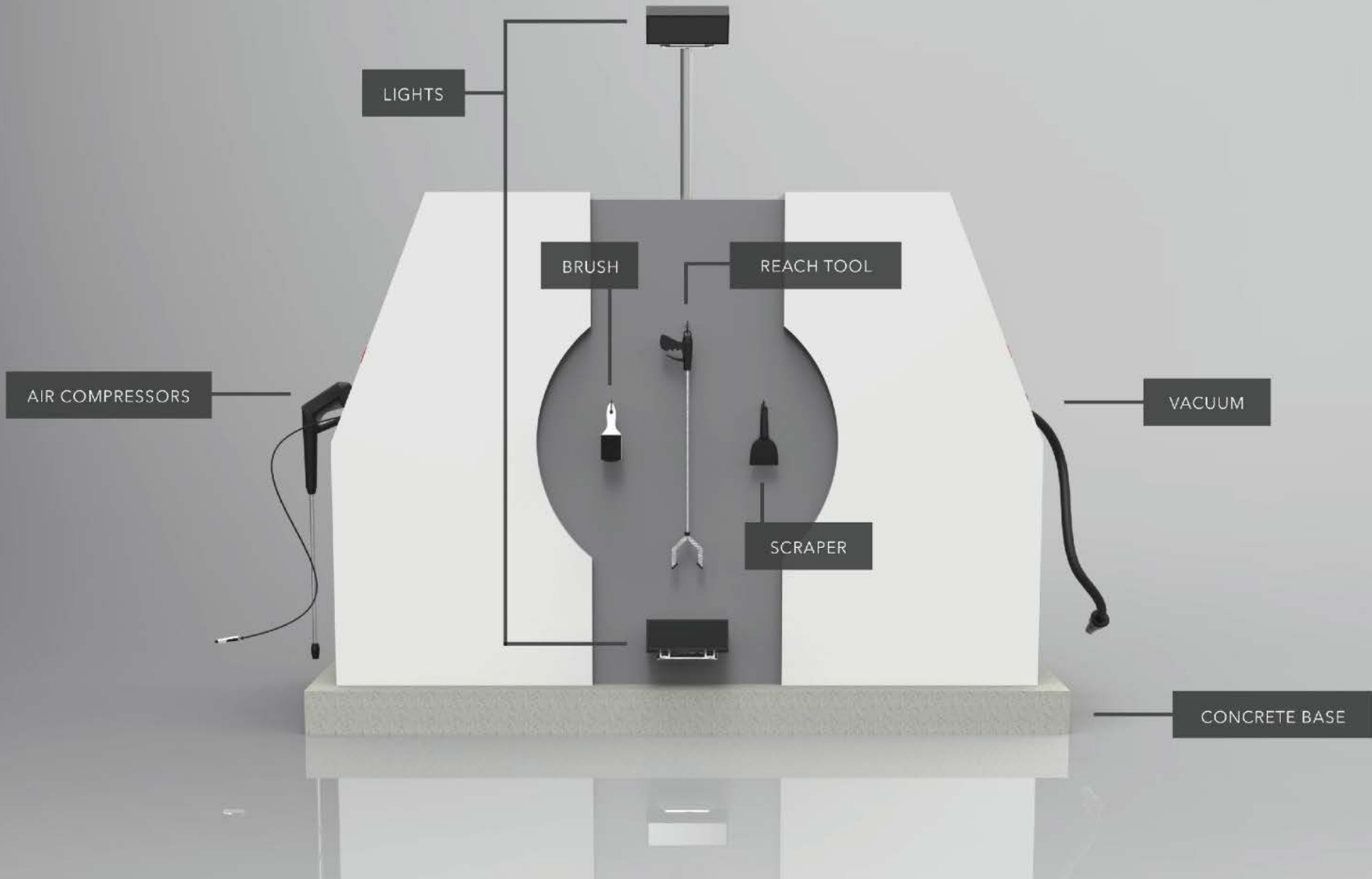
Minnesota
DNR

Texas Park &
Wildlife



Partnerships









Home

Reports

Mark Steven

Secure

https://s21.remoteaware.com/lotConsole/Home#Stations

CD3 STATION REMOTE PORTAL

Views

Grids

Actions

Mark

Stations

	Status	Name	Location	Air Button	Last Repo	Vacuum B	Light Buttr	Off Button	Tool 1 Use	Tool 2 Use	Tool 3 Use	Compress	Tank Leve	AC Voltage
●	Normal	Station #1	Bryant Lake	74 times	7/17/2017 2:49 PM	62 times	20 times	65 times	208 times	150 times	436 times	47 times	11%	3 volts

Map

Navigate

Details

Provision

View All

	Reading	Value	Date	History
●	Tank Level	11%	7/17/2017 2:49 PM	
●	AC Voltage	3 volts	7/17/2017 2:49 PM	
●	Air Button Uses	74 times	7/17/2017 2:49 PM	
●	Vacuum Button Uses	62 times	7/17/2017 2:49 PM	
●	Light Button Uses	20 times	7/17/2017 2:49 PM	
●	Off Button Uses	65 times	7/17/2017 2:49 PM	
●	Tool 1 Use Count	208 times	7/17/2017 2:49 PM	
●	Tool 2 Use Count	150 times	7/17/2017 2:49 PM	
●	Tool 3 Use Count	436 times	7/17/2017 2:49 PM	
●	Compressor Uses	47 times	7/17/2017 2:49 PM	

CLEAN

DRAIN

INITIATIVE

MyCD3Station.com

© 2018

CLEAN-DRAIN-DRY-DISEASE

CD³

WATERCRAFT
CLEANING INSTRUCTIONS

BY BOATERS  FOR BOATERS™

Please select your boat type:



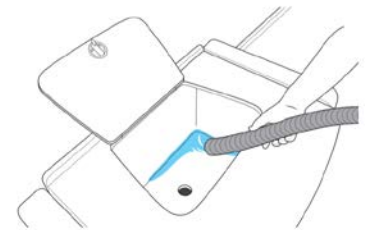
Clean off trailer

10 / 20



Suck out all water in boat

8 / 20



Check for zebra mussels

15 / 20



Goals of Pilot

- Target: “Day Boaters”
- 5 locations
- Diversity of boater types
- Small - large launches
- Clean-in vs. clean out
- Urban - rural landscape
- Oligotrophic - eutrophic





Bryant Lake- suburban, park district

- Above curb
 - Retrofit
 - Clean out
-

Use

- Installation: June 21
- 3,806 total “BMP” tool uses
- Top uses: brush, reach tool, wrench





Pike Lake- rural, municipality

- Street height
- Retrofit
- Clean in/out

Use

- Installation: June 27
- 885 total tool uses
- Top uses: vacuum, brush, wrench





Minnetonka: suburban, county

- Street height
 - Retrofit
 - Clean in/out
 - Solarized
-

Use

- Installation: August 16
- 679 tool uses
- Top uses: grabber, brush, blower





Lake Riley- suburban, municipality

- Street height
- Custom designed ramp
- Clean out

Use

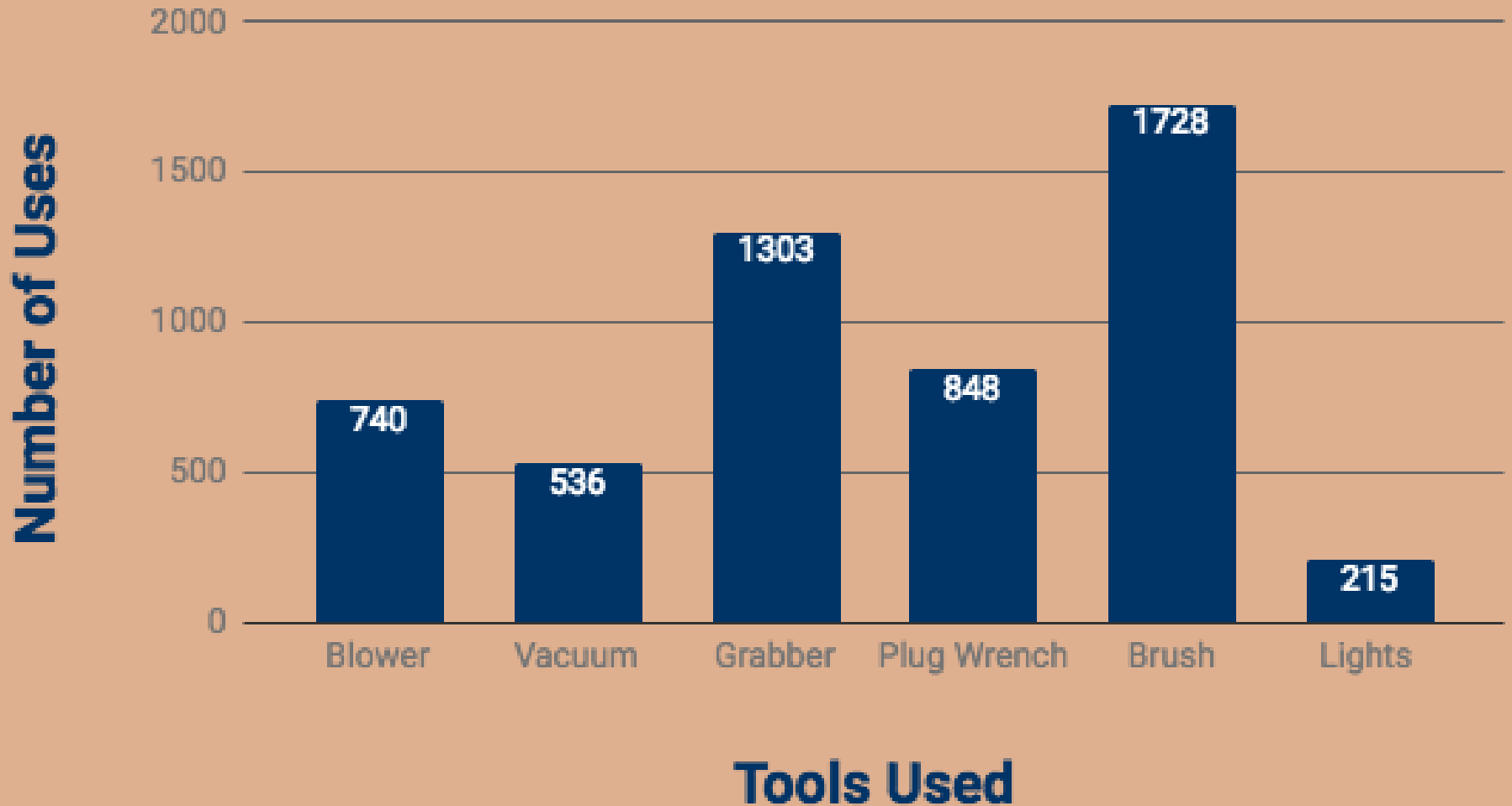
- Installation: Sept. 22
- 435 total uses
- Top uses: grabber, brush, blower







Total Tool Uses 2017



2017 Review

- High tool use + adoption by boaters
- Marketing + engagement asset
 - Custom messaging
- Accessible by boaters 24/7
- Automatic metrics and maintenance alerts
- Low O & M
- No vandalism

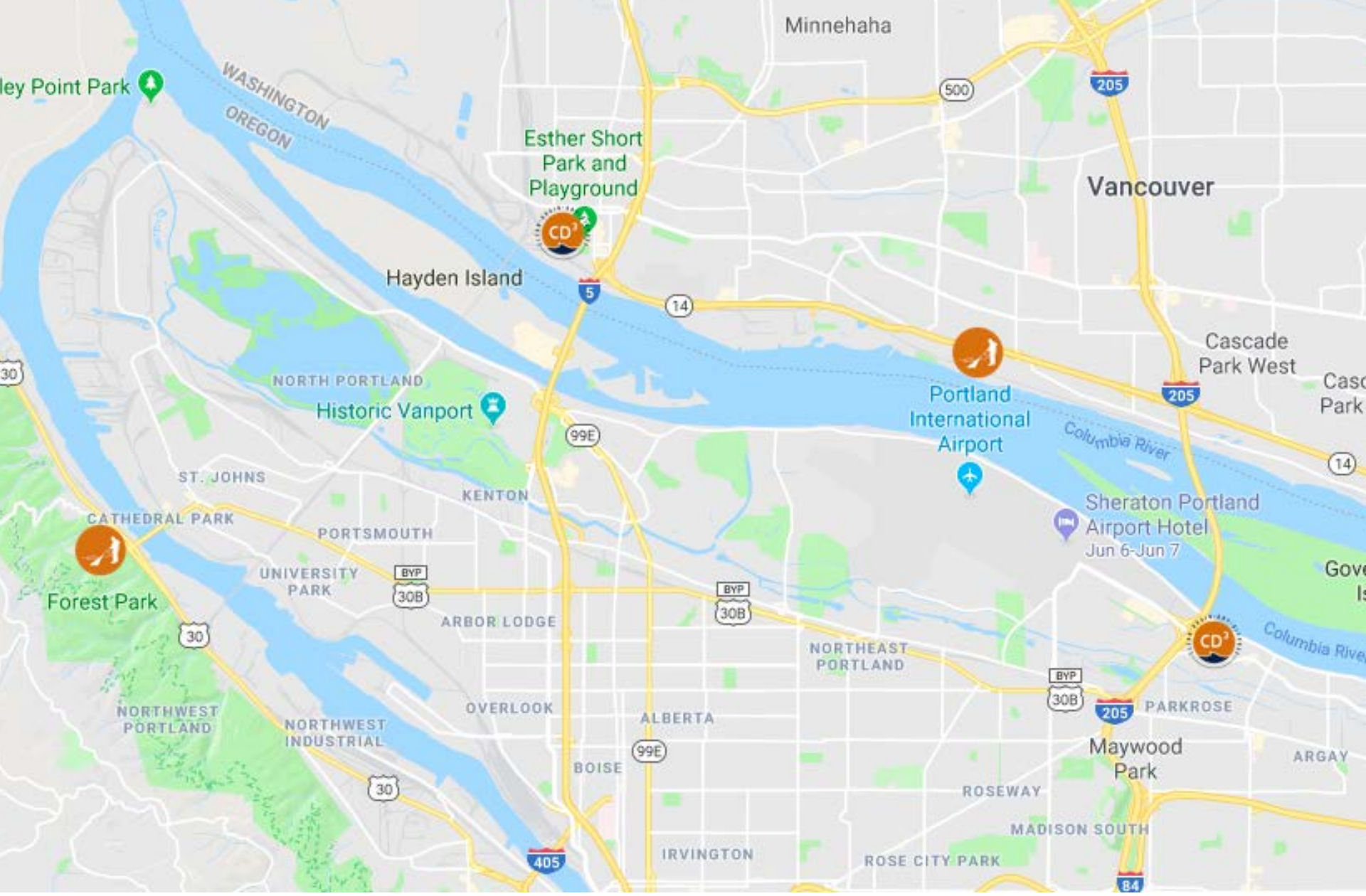
2018 and Beyond

- User **survey**s + interviews
- 3rd party efficacy research
- Custom programs
 - Tools, videos, geofencing, check -in
- Commercialization: expanding nationally
 - Solar + off-grid
 - Trailered options

Outpost & Terrestrial

- Outpost: smaller, off -grid
- Exchanging tools for trail - heads





Empowering...



Empowering AIS Prevention



ACTIONS!!



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Questions?

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