

Aquatic Plant and Algae Management and Endangered Species Stresses or Stressors, Risks or Benefits?

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Compliance Services International

Aquatic Plant Management Society 2017
Daytona Beach, Florida



My apologies for not being
able to be with you today!

Bernalyn McGaughey

**THE AQUATIC
PLANT MANAGEMENT
SOCIETY, INC.**



**CAESAR'S PALACE
Las Vegas, Nevada, U.S.A.
July 11-14, 1982
Sunday through Wednesday**



Aquatic Herbicides: Stressors or Stresses?

The mixed impression of aquatic herbicides



As stressors that pose a hazard to listed species



Tools that relieve stress by enhancing habitat recovery and benefiting ecosystems

A Few Basics

- Registration or re-registration of a pesticide by EPA is considered a federal “action”
- EPA authorizes the pesticide for use or uses described on the label
- The pesticide label defines the federal action

GROUP	14	HERBICIDE
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Clipper™

HERBICIDE


For management of aquatic weeds in bayous, canals, drainage ditches, fresh water ponds, lakes, marshes and reservoirs

Active Ingredient	By Wt.
*Flumioxazin	51%
Other Ingredients	49%
Total	100%

*2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isindole-1,3(2H)-dione

Clipper™ Herbicide is a water dispersible granule containing 51% active ingredient.

EPA Reg. No. 59639-161 EPA Est. 11773-IA-01

KEEP OUT OF REACH OF CHILDREN
CAUTION
 SEE BELOW FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS & DOMESTIC ANIMALS
CAUTION
 Harmful if inhaled or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust and spray mist. Avoid contact with skin, eyes or clothing.

FIRST AID

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible.
- Call a poison control center or doctor for further treatment advice.

If on skin or clothing:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

(continued)

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, shoes and socks.

Follow manufacturer's instructions for cleaning/maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

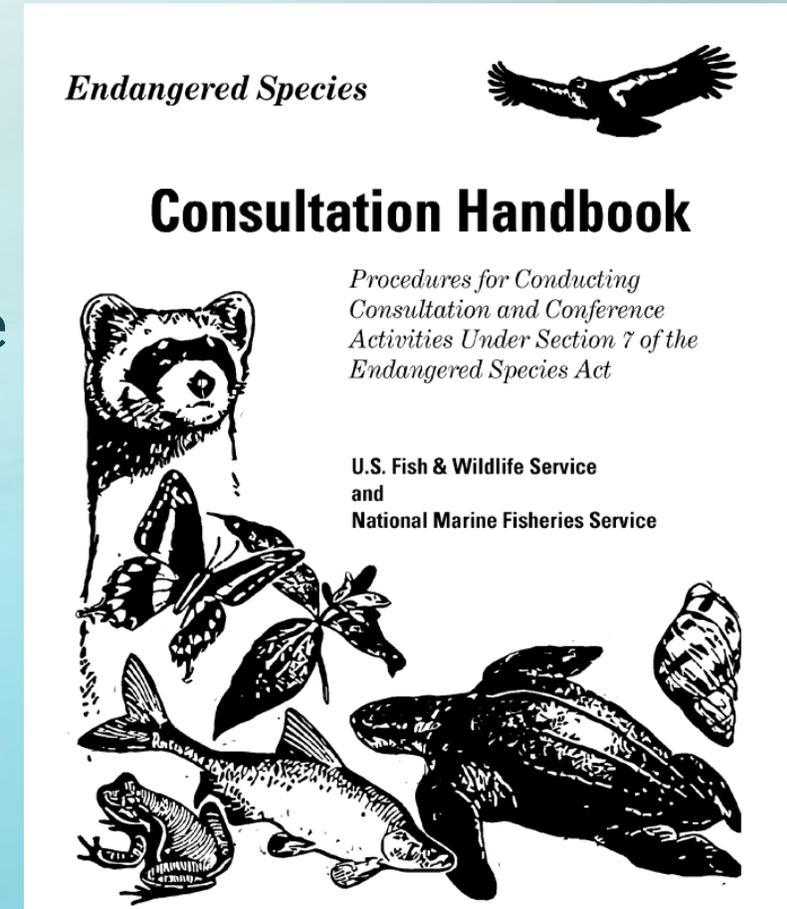
ENVIRONMENTAL HAZARDS

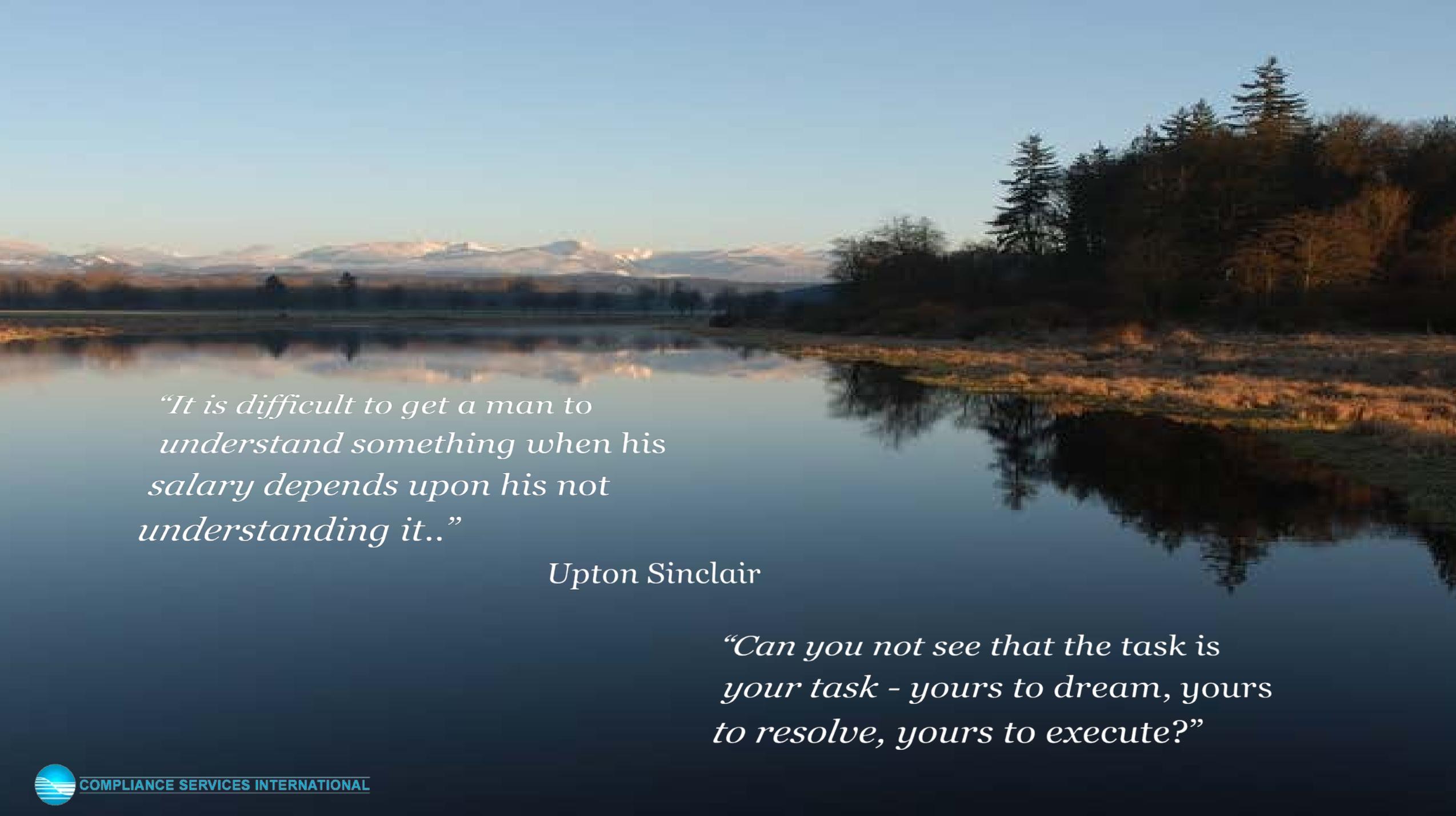
If not used in accordance with directions on the label, this product can be toxic to non-target plants and aquatic invertebrates. Do not apply to water except as specified on the label. Drift and runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas, if not used in accordance to label directions. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

Clipper Herbicide Page 1 2011-CLP-0001

A Few Basics (2)

- Under section 7 of the ESA, EPA is required to consult the USFWS and NMFS to ensure that any federal action is not likely to jeopardize the existence of listed species and/or their designated critical habitat
- Consultations are typically completed on a single action but programmatic consultations, addressing multiple actions, have been completed for other types of federal actions





“It is difficult to get a man to understand something when his salary depends upon his not understanding it..”

Upton Sinclair

“Can you not see that the task is your task - yours to dream, yours to resolve, yours to execute?”



Can you not see that the task is your task - yours to dream, yours to resolve, yours to execute?

- Programmatic consultation (“Yours to Dream”)
- The challenges to overcome (“Yours to Resolve”)
- Steps towards the goal (“Yours to Execute”)



*Can you not see that the task is your task - **yours to dream, yours to resolve, yours to execute?***

- Programmatic consultation
 - Addresses multiple projects or actions with impacts similar in nature
 - Requires applicants to take specific steps
 - Establishes priorities for minimization, mitigation and conservation
 - Helps maintain biological and ecological diversity
 - Aims to standardize mitigation and compensation requirements
 - Intended to streamline and simplify future projects/actions
 - Future projects/action can be appended to consultation
 - Can be re-evaluated over time

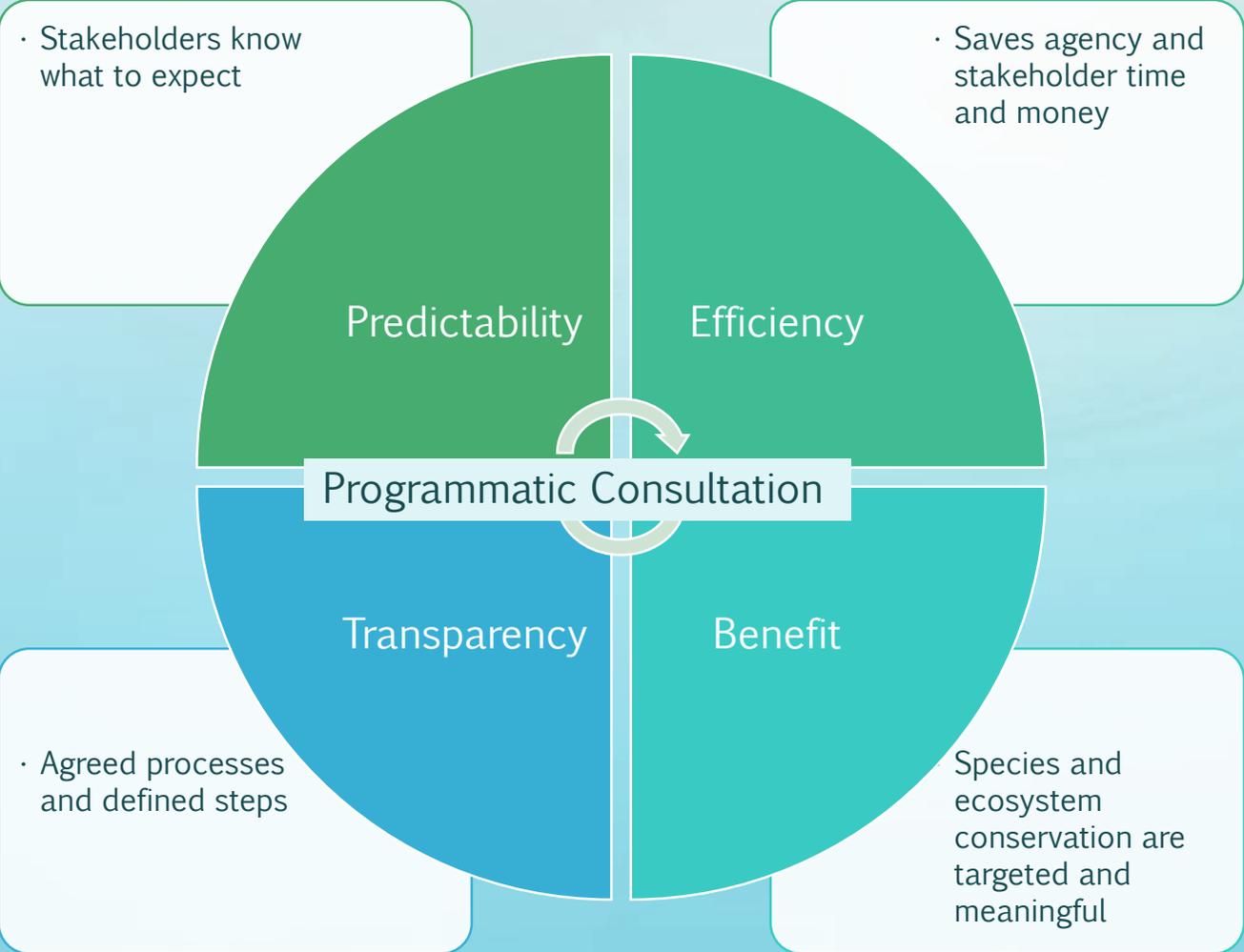
Indiana Bat and Northern Long-eared Bat Section 7 Consultation and Conservation Strategy for the Federal Highway Administration, Federal Railroad Administration and Transit Administration

The U.S. Fish and Wildlife Service (Service) and Federal Highway Administration (FHWA) have standardized their approach to assessing impacts to Indiana bats and northern long-eared bats from highway construction and expansion projects; then avoiding, minimizing and mitigating those impacts.



Northern long-eared bat
Photo courtesy of Dave Thomas

Can you not see that the task is your task - yours to dream, yours to resolve, yours to execute?



*Can you not see that the task is your task - yours to dream, **yours to resolve**, yours to execute?*

- The challenges

- It is likely that an aquatic herbicide treatment will be considered a “wide ranging” use with no spatial definition in exposure modeling
- Exposure will be calculated from maximum label rates and minimum dilution and degradation estimates
- Toxicity endpoints will be from most sensitive species and lowest published values with little consideration of data relevance and reliability
- Best management and state or local permitting practices and the protection they bring will not be considered in the species assessment process
- Assumed use rates and frequencies, and area of a waterbody treated, will be assumed to be unrealistically high



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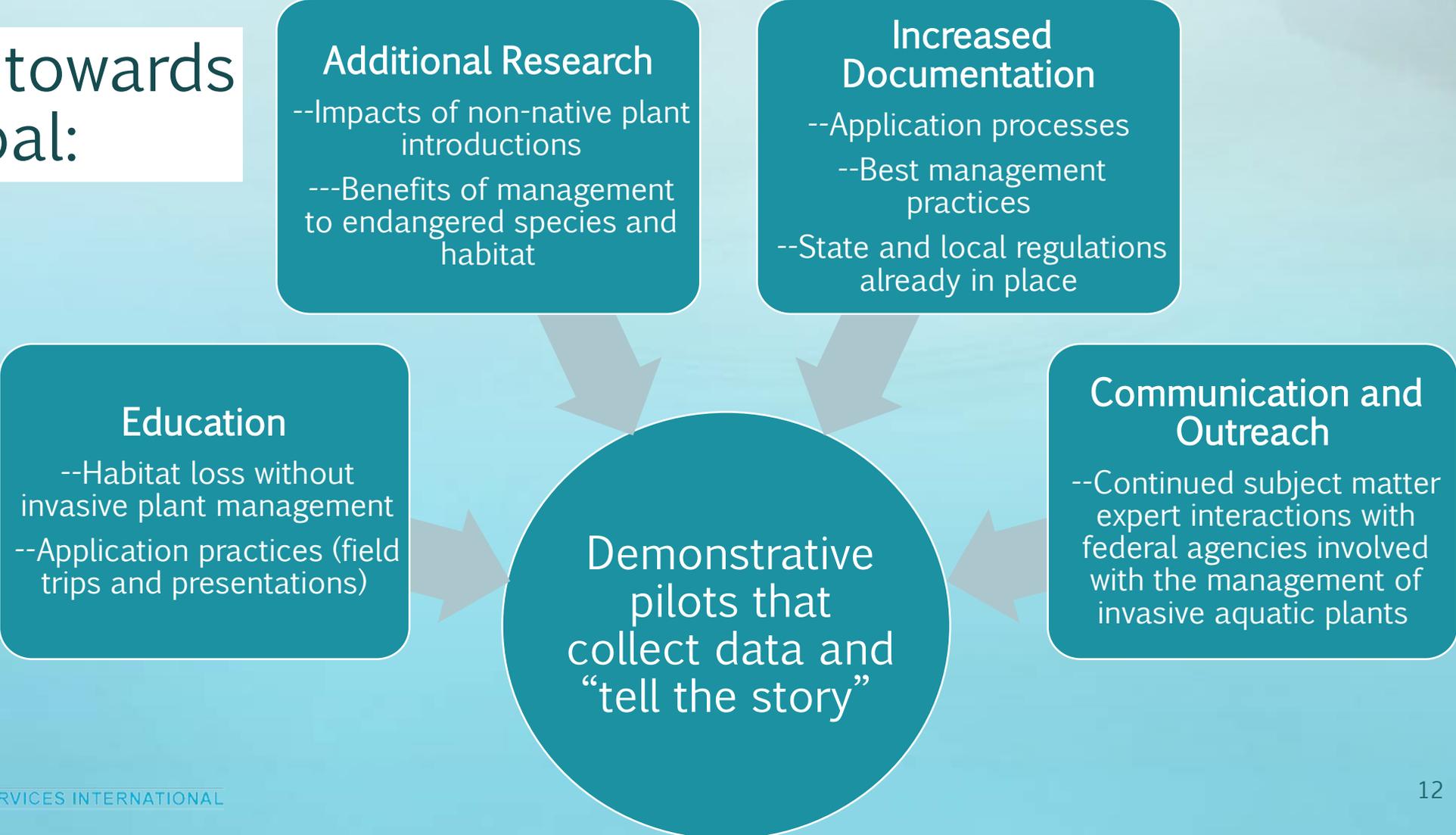
- The challenges (continued)
 - Action area of an aquatic herbicide treatment will likely consist of entire US, potentially affecting every ESA-listed species
 - All available data, including monitoring, use information, and spatial datasets are not fully appreciated or used in the assessment process
 - Process is currently not transparent so results are variable and unknown

Resolving the challenges of the current “interim process” and its dysfunction will require a proactive effort on the part of the pesticide users and registrants



Can you not see that the task is your task - yours to dream, yours to resolve, yours to execute?

Steps towards the goal:



*Can you not see that the task is your task - yours to dream, yours to resolve, **yours to execute?***

- Demonstrative pilots that collect data and “tell the story”
 - Collect elements that support BMPs and build toward programmatic consultation
 - Potential to streamline the registration and consultation process
 - Promote collaboration and consistent decisions
 - Public outreach and education
 - Lay groundwork to promote more rapid restoration of aquatic habitats



*Can you not see that the task is your task - yours to dream, yours to resolve, **yours to execute?***

You can help!!



A low-flying wood stork at Pelican Island National Wildlife Refuge in Florida.
Photo Credit: Tom MacKenzie, USFWS

Share your stories about successful aquatic weed management to improve endangered species habitats



The California clapper rail — a bird found only in the bay — has come to depend on an invasive salt marsh cordgrass for nesting habitat. (Photo: Robert Clark)

Know of any good sites that would make a “pilot” demonstration?

Are you familiar with sites that institute management practices to reduce threats on endangered species (limitations on use, timing, proximity, etc.) or have you run into other issues with endangered species?

Thank you for this opportunity to share our thoughts and opinions

Ashlea Frank

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