



Innovating Technological Solutions to the Invasive Species Challenge

We Can Do This...

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NATIONAL INVASIVE SPECIES COUNCIL
—SECRETARIAT—

⋮ Invasive Species:



...means, with regard to a particular ecosystem, a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health.

- Ecosystem specific
- Harm – known or likely

⋮ Safeguarding the Nation

- Invasive species impact every aspect of national security:
 - human, plant, and animal health
 - food and water availability
 - the integrity of critical infrastructure
 - livelihoods and survivorship
 - military readiness
- In the US, environmental damages and associated losses from invasive species are already amounting to more than \$100 billion annually.



⋮ Invasive Species in U.S. Policy

“It is the policy of the United States to prevent the introduction, establishment, and spread of invasive species, as well as to eradicate and control populations of invasive species that are already established.” ~ Executive Order 13751



⋮ Federal Leadership

NATIONAL INVASIVE SPECIES COUNCIL

- Membership: Senior officials of 13 departments and 3 WH offices (CEQ, OSTP, OMB)
- Co-Chairs: DOI, USDA, DOC
- Charge: “Provide the vision and leadership necessary to coordinate, sustain, and expand Federal efforts to safeguard the interest of the United States through the prevention, eradication, and control of invasive species...”
- Staffing: NISC Secretariat. Small team of experts on invasive species policy, science, communication, and interdepartmental coordination administered by DOI.

INVASIVE SPECIES ADVISORY COMMITTEE

- Membership: “Representatives of diverse stakeholders who have expertise to advise the Council.”
- DOI Secretary appoints ISAC members after consultation with other NISC members
- Established under FACA (5. U.S.C.App.), charter administered by DOI
- Provides advice at the request of NISC through white papers/recommendations
- e.g., Recommendations on invasive species impacts on infrastructure adopted last December

⋮ Federal Priority Setting/Guidance

EXECUTIVE ORDER 13751

- Section 1: Policy
- Section 2: Definitions
- Section 3: Federal Agency Duties
- Section 4: Emerging Priorities
- Section 5: NISC
- Section 6: NISC Duties
- Section 7: Management Plan
- Section 8: DOS/DOD Provisions
- Section 9: HHS Provisions
- Section 10: General Provisions

2016-2018 NISC MANAGEMENT PLAN

- National EDRR Program
- Regional focus on Pacific, Arctic, [North America](#)
- Improving coordination with states, tribes, territories
- Reducing risks via managed relocation, movement of watercraft, seed/planting re restoration
- Fostering development, adoption, and sharing of decision support tools
- Advancing technologies for prevention, eradication, and control of invasive species

What Stops Us?

Miconia wins: Experts concede Hawaii Island has lost the war against invasive plant

Published May 1, 2017 - 12:05am

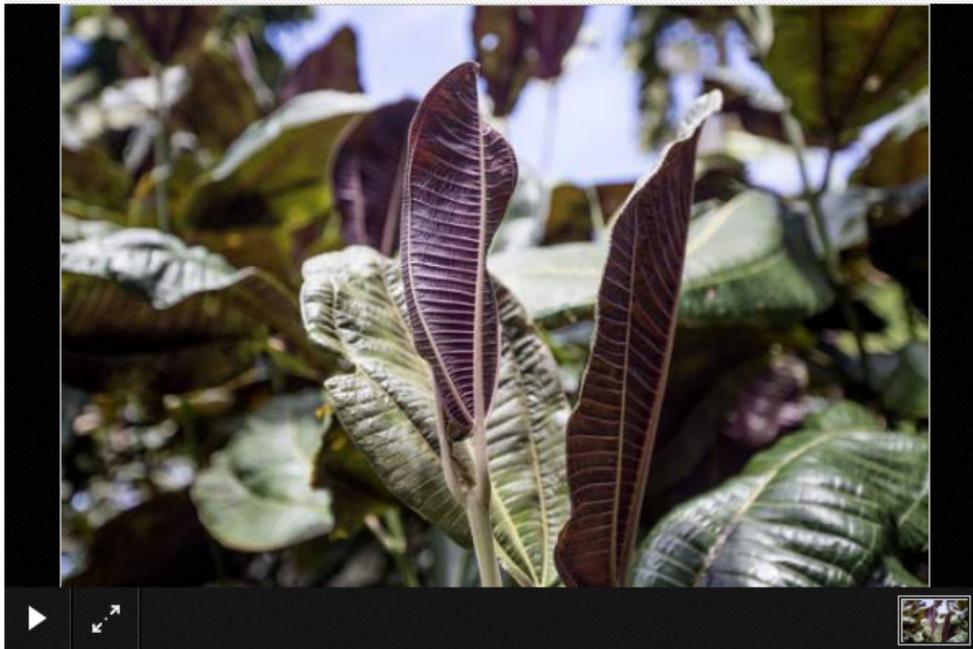
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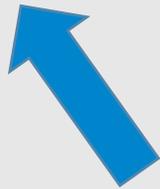
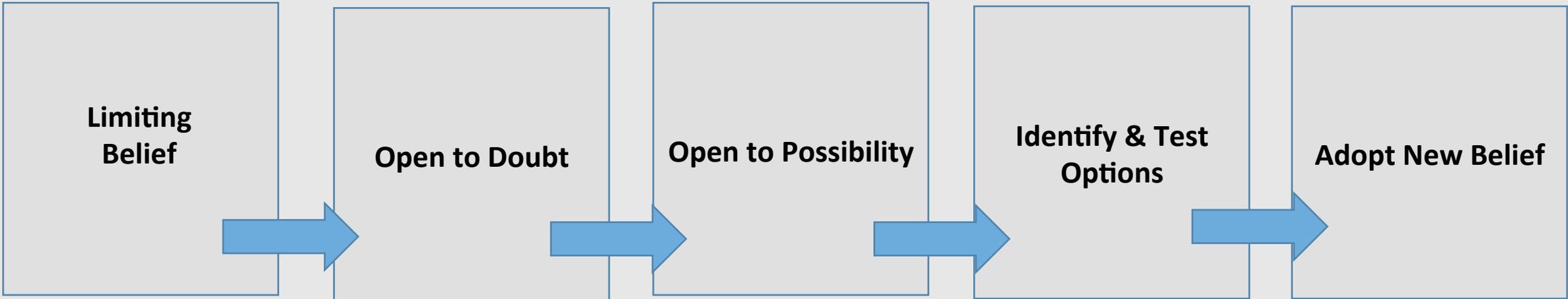


By IVY ASHE Hawaii Tribune-Herald

- Funding?
- Human capacity?
- Methodology toolkit?
- Will?
- Perspective?



Belief Change



Innovation

■ Innovation Summit

- Advancements in technology innovation called for in MP and EO 13751
- First Innovation Summit held on Dec 5, 2016
- Numerous activities around advanced genetic technologies
- March 15, 2017: Senate Environment and Public Works Committee hearing on innovation/invasive species
- WildAid Bill (s. 826) – includes innovation prizes
- April 21-23: Earth Optimism Summit – Make for Planet Challenge with invasive species theme
- Next Innovation Summit?



The current toolbox for addressing invasive species is incomplete and, in many cases, inadequate. Investments in technology innovation enable us to change the conversation from “We can’t” to “We can!”

Creating an Innovation Culture



- We can and need to incentivize innovation
- Technology reapplication can be cost-effective and expand markets
- A complex, context-specific issue requires a flexible toolkit
- As the toolbox grows, tools can be used in effective combination
- Regulatory evolution will be necessary
- Social acceptance is imperative

#wecandothis