

National Priorities Exercise – Compilation of Information

February 24, 2023

In preparation for the March 6-8, 2023 meeting of the Invasive Species Advisory Committee (ISAC), members were asked to submit their top three invasive species priorities to be addressed at a national level. The following document includes those priorities sorted by different topics, and in some cases notes connections with other topics. Text has been maintained as originally submitted, and the categorization process is simply to facilitate review. This information is being provided to ISAC for further deliberation on whether and how to communicate identified priorities to the National Invasive Species Council and its member agencies for further consideration.

Biological Control

Increasing the development, utilization, and support for biological control of widespread high impact invasive species: Biological control of invasive weeds and insects is the only feasible and potentially successful long-term management option for widespread and well-established species. Despite this fact, programs, policies, and funding that advance research and development as well as implementation and monitoring of biocontrol agents remains piecemeal and underfunded with a cumbersome and slow process for approval of agents. This is potentially limited by a lack of information and understanding of the safety, effectiveness, and cost benefit of this control strategy as well as push back from interest groups that seek to maintain some invasive species on the landscape. Improved communication on the benefits and safety of biocontrol (as compared to other management options or no action) together with streamlined processes for review and approval of agents, coordinated programs and funding to advance the research and implementation could reduce impacts of many widespread invasive species in the US. [Outreach and Engagement, Policy and Institutions, Research and Assessment]

Biosecurity, Prevention, and Pathways

Biosecurity: Updates to regional and national biosecurity plans, personnel, and facilities, within and across agencies, are an urgent priority, especially in light of the impacts climate change is having and will have on invasive species introduction pathways and establishment. The Pacific Islands region is a particular point of vulnerability for the continental US, particularly the south, given the near total lack of adequate port and inspection facilities for trans-Pacific air and sea transport (including US military) and increasing trade with major Asian economies. [Climate Change, Regions and Biomes]

The issue of new plant pest species entering the country suggests that there are areas for improvement to monitoring, enforcement, inspection, etc. to minimize introduction. The issue is not limited to plant pests however. Does this weave into a more comprehensive biosecurity philosophy for the nation as a whole. Is there value in re-examining the 2002 BioScience publication? Is there value in examining how individual existing strategies could be better served in a broader biosecurity strategy for the nation?

Biosecurity and Invasive Species: NAISMA supports strategic biosecurity efforts to prevent and reduce the impacts of invasive species on our nation's food and water supply, wildlife and natural resources, biodiversity, safety, health, and infrastructure.

Are Bordering Countries to the U.S. Doing Enough to Prevent Invasive Species Spread? The spread of invasive species both naturally and via human movement across the U.S. grows as population and the economy continue to expand. With these expansions, pest incursions from neighboring countries are increasing and the question must be asked, "Is enough being done to stop it?". For example, in 2021 Canada was responsible for shipping Box Tree Moth-infested nursery stock directly to 6 U.S. states which forwarded that material, in part, to nearly all 50 states. Additionally, natural spread was confirmed from Canada to New York in 2022 as the moths naturally crossed the Niagara River. Following a U.S. quarantine of Canadian boxwoods, Canada responded in late 2022 by announcing a plan to externally quarantine the very U.S. states they caused to become infested months previously. While these issues are certainly delicate as international trade of more than just agricultural products is at stake, this committee could consider whether additional recommendations could be made to federal agencies in ensuring invasive species don't cross country lines without cause.

Prevention by Pathway: Much of the prevention of entry of new potentially invasive species is based on species specific risk profiles and actions. This is an inherently flawed approach, most crucially because many invasive species are entirely (or nearly) unknown to science until they become an invasive in an introduced range. Issues such as the effects of climate change on native ranges, and the beachhead effects of ever shifting species range and density, also make pest profile-based approaches less effective in the current global setting. Federal agencies should be shifting to a pathway-based paradigm, wherein commodities and conveyances are evaluated, and risks are mitigated according to the invasive species risk of the pathways themselves, with the history or projection of known/potentially invasive species and their historical ranges being only two of a myriad of factors in a holistic pathway-based prevention.

Reduce invasive species risk from incidental discharges: Evaluating in-water cleaning with capture technologies and implementing a regulatory framework for their use (pursuant to VIDA) could achieve multiple positive outcomes including disease and invasive species risk mitigation, emission reduction, fuel efficiency, and water quality protection. The regulatory framework for testing and use of ballast water treatment systems is an exemplar of science-based policy that accelerates advances in environmental protection technologies.

Non-agricultural, non-listed hitchhiking pests = no authority to take preventative action at the port of entry: Gaps between CBP, USDA APHIS, DOI, and CDC agency mandates & authorities provide an opportunity for a variety of hitchhiking taxa to enter the U.S. and proliferate—even if they are detected at the port by federal inspection agents—because they are not clearly viewed as risks to agriculture, they are not listed on the Injurious Wildlife list, they are not human pathogen vectors, etc. Examples of gap species include many species of geckos, frogs (including coqui), and spiders (such as the Joro spiders that are becoming widely established in the Eastern U.S.). Having the clear authority to take action on these types of hitchhiking species can potentially prevent cultural, quality of life, or ecosystem, or infrastructure harm by the species or by the pathogens and parasites they can carry. [Policy and Institutions]

Climate Change

Climate change: Climate change is already altering biodiversity nation-wide, through changes in species ranges, seasonal and ecosystem processes, and genetics. Native and invasive species responses to climate change impacts will be different, with important economic and biological outcomes. Given the expected consequences of climate change on invasive species, national attention should prioritize the prevention of new invasive species arrivals and establishment; anticipation of new transport and introduction pathways; and development of novel management and control strategies. [Biosecurity, Prevention, and Pathways]

Incorporating climate change into invasive species policy and management strategies: As we accumulate scientific knowledge on the interactions between invasive species and climate change, there is a growing need to incorporate climate change into invasive species policy and management. This need has been communicated through surveys of invasive species managers and is highlighted in the amendment to the executive order on invasive species which states. Federal agencies shall consider the impacts of climate change when working on issues relevant to the prevention, eradication and control of invasive species including research and monitoring efforts and integrate invasive species into Federal climate change coordinating frameworks and initiatives. Climate change is likely to 1) exacerbate the negative impacts of invasive species; 2) facilitate range expansion of current invasive species; 3) make ecosystems more vulnerable to invasion; and 4) reduce the efficacy of control methods and these considerations should be included as national invasive species decisions are made. Additionally, there is an opportunity to integrate invasive species prevention and response strategies into climate change policy and action plans.

Climate Change and Invasive Species: The North American Invasive Species Management Association (NAISMA) supports the inclusion of the impacts and influence of invasive species in climate change legislation, policy, management, and research. The reverse is also important; the impacts and influence of climate change must be incorporated into invasive species management and policy. Climate change can accelerate and exacerbate many of the most severe impacts of invasive species. Invasive species make both the built landscape, and the natural systems we all depend on, less resilient to the effects of climate change. Invasive species can negatively impact climate change mitigation efforts in many North American ecosystems. [Policy and Institutions, Research and Assessment]

Climate change is a topic that is of eminent value to explore. There are so many facets to this that could be focused on as they relate to invasive species. The issue of wildland fire has important overlap with climate and invasives as well. [Wildland Fire]

Data and Information Management

Information Transparency: A tremendous amount of information relevant to invasive species prevention, regulatory compliance, and incidence, is being collected by individual federal agencies for their internal use purposes; this same information could be immensely useful to academic researchers, inter-agency cooperation, and private entities seeking to reduce their exposure to invasive species' risks. It is not enough for data to be cleared and released upon request, data should be shared in publicly accessible online spaces as a matter of policy, so that the information transparency itself becomes a tool for continuous improvement of invasive species prevention and management.

Prohibited species database: Develop and maintain an online database of federal and state listed prohibited/restricted non-native invertebrates and vertebrates similar to USDA and the National Plant Board posted noxious plant information. Please see State Law & Regulation Summaries - National Plant Board.

Invasive species information and education: There are 3,000 conservation districts across the United States, which are located in every state and most U.S. territories. Approximately 17,000 supervisors or commissioners oversee these districts, which work directly with the Natural Resources Conservation Service (NRCS). NRCS and DOI should leverage conservation districts to enhance information sharing about the location and distribution of invasive species through the use of technology and data standards to empower local governments and stakeholders to identify, monitor, and control invasive species populations at the local level before they become unmanageable.

Disaster Relief

Disaster relief from invasive species damage: Federal disaster relief through the Federal Emergency Management Agency (FEMA) or USDA should be available to compensate public and private entities for damages caused by outbreaks of invasive species. These outbreaks are just as unexpected as other natural disasters such as hurricanes, floods, drought, earthquakes, and tornados. Invasive species cause billions of dollars of damage each year to agricultural crops, urban landscapes, aquatic infrastructure, and to a multitude of noninvasive species.

Early Detection and Rapid Response (EDRR)

National EDRR Framework: Early Detection and Rapid Response is our best hope to prevent large infestations of new species. USGS is leading an effort using Bipartisan Infrastructure Law funding to implement this framework. However, all partners at all levels of government need to be included/engaged in this effort to ensure success. Consistent taxonomy and unified reporting platforms should be considered.

National Leadership on EDRR: Working with regional Invasive Species Councils, assist with funding and coordination of "strike teams" that can travel to where new infestations are discovered and coordinate and lead the effort of containment and eradication. The notification process of new detection between Federal and non-Federal organizations needs to be clearly defined. Part of the coordination of an effective EDRR program should also include formalized relationships between federal leads and non-federal leads for all entities involved in a potential new infestation. Most state agencies are not trained in emergency response situations and valuable time is spent determining the path forward, while the species begins to spread, sometimes to the point of where it can no longer be contained or eradicated.

Increase Invasive Species Early Detection Funding: USDA-APHIS-PPQ funds National Plant Board members (the states) with survey efforts aimed at detecting known invasive plant pests early to increase the success of potential eradication efforts. It is widely understood and accepted that early detections increase agencies' success rate of thwarting the invasion curve before pest establishment occurs. In the past 20 years, funding has remained stagnant for some of these funding sources and, as inflation soars, the threat of states losing these programs grows. This committee could discuss new strategies to funding these efforts.

Create a repository of successful invasive species efforts and seed money to start eradication: Have the ISAC solicit and house successful invasive species action plans, outreach materials, and effective eradication or control strategies across taxonomic groups for use by other states departments of agriculture or natural resources agencies. If possible, allow for initial funding of high priority invasive species projects to initiate rapid response activities for any incipit invasive species population. This would be of national import as it will quickly allow a state to find needed direction and potential funding to eradicate a small infestation prior to it becoming established and allow time for the state to develop internal resources to complete the eradication or control project, therefore limiting the spread of the invasive species and ultimately protecting the United States.

Federal assistance for interstate inspection sites and rapid response to invasive species outbreaks: The Secretary of the Department of the Interior should seek statutory authorization to establish a grant program to support state government inspection and decontamination stations to prevent the movement of invasive species, and state rapid response actions to control new outbreaks of invasive species. Grants supporting state inspection and decontamination stations could be used to help hire personnel to man inspection stations, construct inspection stations, and train certified inspectors to man stations. For grants supporting state rapid response actions, the Secretary of the Department of the Interior should be directed to provide funding to support state rapid response actions without having to follow routine and time-consuming budget reprogramming guidelines.

Bolstering EDRR in the face of climate change: Efforts to develop nimble EDRR response capacities across jurisdictions seems to be progressing. If I could pick one thing to focus on, it would be furthering this effort to the goal of on the ground response capacity. That said, an added challenge to reaching EDRR objectives is climate change, which is likely to accelerate introduction rates, modify introduction pathways, and change behavior of established invasive species. Integrating projected effects of climate change on invasive species dynamics into ongoing and planned EDRR programs would help agencies better prepare. [Climate Change]

Examine use of eDNA in detection: Complete a thorough, objective and science-based examination of the circumstances, conditions and expected confidence eDNA sampling will detect non-native species presence at a sampled location. [Research and Assessment]

Human Health

Human Health, especially vector-borne diseases: Numerous human health crises have been facilitated or exacerbated by invasive species, particularly invasive mosquitos. Dengue fever, West Nile Virus, zika, chikungunya, malaria, and yellow fever are all spread by nuisance invasive mosquitos within the continental and insular United States. Improvements are urgently needed in early detection and response, inter- and intra-regional biosecurity, and innovative control techniques such as natural enemies and genetic modification. These efforts will have economic and ecosystem co-benefits, such as preventing avian malaria outbreaks.

Outreach and Engagement

Citizen/Community Science and Invasive Species: How do we get the public engaged in reporting invasive species? How do we get Federal agencies across Departments to use the same tools and messaging? To succeed with the National EDRR Framework, the public needs to be engaged. [EDRR]

National leadership for regional Citizen Science programs: Coordination and funding aimed at educating the general public about invasive species, what to survey for and how to report priority species in their region. Invasive Plant Councils could be the lead for plant species and Fish and Wildlife agencies the lead for animal species, for example, with the NISC providing the coordination on a national level. The PNW IPC has led a citizen science training and surveying program for eight years, but more funding is needed, expertise and regional and national coordination. Many new infestations have been discovered and identified by trained citizen scientists, they are typically already out on the ground, hiking, mountain climbing, kayaking, boating, etc., they just need to know what to look for and where to report it. [EDRR]

Interagency Prevention Outreach/Education: Educating the public on invasive species issues and the individual's role prevention is a national concern but is often regionally specific. For this reason, improved coordination at regional levels between federal, state, local, and tribal entities might improve outreach efforts on regionally important topics. A needs/gaps assessment for improved regional outreach/education may put light on opportunities to better leverage efforts.

Hold a National Invasive Species Summit: The goal is to bring together diverse groups of stakeholders including but not limited to under-represented communities, minorities, tribes, farmers, ranchers, nursery industry, state and county agricultural officials, natural resource officials, and non-governmental organizations to prioritize invasive species issues that need to be addressed. This ranked list of invasive species priorities with hundreds of organizations input and support will allow our national invasive species council to have a clear list of invasive species initiatives to choose from. With limited resources available for invasive species projects, it is nationally important to use these resources on the highest and best use – having a vetted and universally supported road map for invasive species investments will aid in the expedited efforts to protect the United States agriculture, natural resources, and unique biodiversity from invasive species.

Policy and Institutions

Federal Noxious Weed List: What are the implications of having a species on the list and does the list need updating? How are agencies outside of APHIS utilizing the list? Does the intent and purpose of the list need to be re-evaluated to serve a larger role then it does now?

Regulations and permitting coordination: Focus on increasing regulations regarding the pet trade, nursery trade and internet sales. Lead the coordination between federal and state agencies regarding enforcement. Work on coordination of permitting issues when actions cross state/federal land boundaries. Permit requirements change depending on the land ownership (federal or state), provide clear processes and roles of the federal and state leads.

End-to-End Support of Existing Rules, Regulations, and Recommendations: There is a devastatingly confusing and inconsistent array of rules, regulations, and recommendations for individuals, businesses, and public entities with regards to the movement of commercial or private goods that may be bearing invasive species (e.g., hay, firewood, boats, live plants), as well as the species themselves (e.g., pet trade, live bait). Even the most well-designed behavior change-based outreach campaigns suffer from a pervasive lack of continuity and funding, while on-the-ground enforcement activities that would critically bolster effectiveness are catastrophically absent. The end-to-end support of science-based behavior change campaigns for those rules and regulations that already exist but are chronically under-

resourced in multiple dimensions and therefore functionally ineffective at ecological scale, would benefit every sphere of domestic invasive species management. [Outreach and Engagement]

National Invasive Species Council Annual Meeting: An annual meeting of the Council to engage the Department Secretaries and/or Under Secretaries on the issue of invasive species and current priorities and cross Department initiatives.

Support development of state invasive species councils: Encourage the development of state invasive species councils for every state. Have the ISAC create draft state council by-laws and draft state invasive species advisory committee charters for states without invasive species council consideration and use. Additionally, ISAC staff and members could provide guidance and support as states initiate development. State invasive species councils are nationally important as they help ensure state departments/agencies work cooperatively prior to and after detection of incipit invasive species populations. Proactively planning for and rapidly reacting to invasive species detections ensures states take action quickly to eradicate or control new invasive species populations so they cannot spread to neighboring states and therefore protecting the nation.

International engagement in invasive species prevention: Through most of the 20th century, international research was growing, and cross-border collaborations were flourishing. Unfortunately, the recent two decades have seen a worrisome trend of national concerns taking priority. Some international research regulation, such as the Nagoya protocol, are welcome and well-intended, but an increasing number of national-level policies and sentiments (in the US as well as in partner countries) have emerged that discourage the exchange of ideas, collaborators, and research material. This, compounded by the COVID pandemic, caused many international collaborations to grind to a halt. ISAC should bring this emerging issue to the attention of agencies and regulators. There are signs on the horizon that even resources that are critical for invasive species detection and identification, such as the NCBI GenBank and other open data providers on which agencies and researchers depend daily, may be curtailed. At the time when international trade — and with it the introductions of exotic organisms - is growing unimpeded, roadblocks to international research must not limit our ability to work with overseas collaborators on studying, predicting, and preventing invasive species. [Research and Assessment]

Regions and Biomes

Focus on forests: Forests are the country's most effective tool in combating climate change, and the only practical nature-based solution currently at hand. They are also a resource imminently threatened by invasive species, across the continent, in all states. The intersection of climate change and invasive species is one of the main NISC themes, therefore forests should be featured prominently throughout the agenda (currently they are essentially absent from the NISC thematic priorities). [Climate Change]

Research and Assessment

Agency pesticide risk assessments: Indaziflam and aminopyralid have demonstrated over the past 15 years that there is a need for federal agencies to collaborate and streamline the approval process for new innovative pesticides for managing invasive species. Due to lawsuits from the 1980's the various agencies have handled the approval differently and unintentionally created roadblocks to landscape/cross jurisdictional management projects in addition to impeding any financial incentives a company would have to researching and registering a new pesticide. Additionally, since the 1980's the

EPA has changed their environment risk assessment at a minimum of three times thereby negating many of the concerns brought up in the original lawsuits. In the same context EPA is currently reevaluating how they evaluate non-target impacts to endangered species from pesticides. Many of these recommendations are not complementary to invasive species management, ISAC could review and provide recommendations to the agency on how to balance invasive species management and endangered species impacts. (Maybe with input from the State FIFRA Issues and Research Evaluation Group. [Policy and Institutions]

Promote fundamental research on invasions biology: History of science shows that breakthrough solutions are rarely devised via incremental, short-term research, but more often through unexpected discoveries in curiosity-driven research. All too often, management of many poorly understood invasive species is running in circles, using outdated or ineffective tools, struggling with the lack of knowledge on the species' biology and weaknesses, and without the opportunity to benefit from breakthrough discoveries. Federal agencies responsible for fundamental research can be involved (for example, NSF should have a program dedicated to invasion biology) and other agencies should be motivated and/or supported to invest in research (those which have research arms but are preoccupied with incremental progress focused on short-term deliverables).

Expanded Support for Technology Innovations: A common impediment to successful invasive species management is the lack of effective tools for detection and control. Often those responsible for invasive species management must rely on innovations from other sectors for new technology. For example, most herbicide chemistries utilized by natural area resource managers were initially developed for agriculture where research resources are plentiful, and these herbicides may not provide optimal solutions for use in sensitive ecosystems. There are many research areas with the potential to yield beneficial technologies (e.g., Al guided detection), but resources (funding, staffing) and coordination among federal and non-federal partners needs to be improved. An assessment of need and programmatic improvements may help inform decision makers on priorities to improve innovation investments.

The economic impacts of invasive species are understood generally and perhaps regionally, and often there is a perpetual need expressed from a management perspective to have an updated figure of those impacts. Is there value in promoting not only a new analysis (i.e., Pimentel 2011) but are there mechanisms that can be brought together to better understand the economic inputs and impacts of invasive species?

Assessing the effectiveness of invasive species control programs: While significant effort is taken to prevent and control invasive species across the US, the outcomes of many prevention and management programs are not assessed and therefore it is difficult to adapt and improve our strategies as well as to understand if our efforts are achieving the original objectives. As a whole, it also weakens justification for further funding and effort to be devoted to invasive species prevention and control efforts. To address this challenge, funding agencies and national programs should incorporate the need to monitor and assess outcomes into their requirements and planning. These outcomes should be more specific than acreage treated, or person hours expended, but instead should focus on whether the species was actually controlled and if gains were made to restore biodiversity or to reach other such goals of the control program.

Species

Feral Hog programs are in place to control damage to agricultural lands which is estimated at 2.5 billion dollars per year. Despite more than one hundred million in federal money, an estimated six million to nine million feral swine still ravage the landscape nationwide. Tearing up planted fields, wallowing out huge bear depressions, out -eat deer and turkey and also eat turkey eggs and even fawns. They carry parasites and disease while polluting streams and rivers with their feces.

Wild Pig/Wild Boar (*Sus scrofa linnaeus***):** With an animal that is a highly adaptable habitat generalist, an opportunistic feeder with high reproductive potential and low natural mortality, Tribes are vulnerable to the spread of these species. Tribes exist based on their relationship with natural resources and any threat to these connections would alter Tribes' livelihoods.

The **Eastern Red Cedar** has become an invasive species on many pastures and rangelands across Oklahoma, Texas, Louisiana, and Kansas. Being that this species is very hard to control as it has become a nuisance to many producers and farmers across the nation. It's ability to quickly sprout and grow anywhere allows the Eastern Red Cedar to grow in fence rows and spread out into the fields and pastures. Research has found that the Eastern Red Cedar can utilize 1 to 21 gallons of water per day depending on the size of the tree. Due to the density of their canopy, it can limit how much rain flow that actually gets to the ground level to replenish the moisture in the soils for the uptake of other plant life.

Wild Horses (*Equus caballus***):** Overpopulation results in competition with other foraging species such as deer and elk, and cumulatively reduces the foods and medicines that are gathered as dietary staples, from the same landscape, by Native American communities. This presents the need for a delicate balance when implementing mitigative measures to remove part of the horse population; as, any action will touch upon culturally sensitive issues, on both sides of the issue.

Northern Pike (*Esox lucius*): An invasive fish species that has the potential to greatly harm any progress made in decades of salmon restoration efforts in the Pacific Northwest (PNW) where billions of dollars (Harrison, John, 2018) have been invested.

Determining Appropriate, Long-term Response Plan for Spotted Lanternfly: The Spotted Lanternfly, native to Asia and highly invasive, invaded Pennsylvania in 2014 and has since spread rapidly to 14 U.S. states. In addition to feeding on 70+ plant species, many important to forestry and agriculture, it's known to destroy grape vineyards when populations are high and has also become a public nuisance to citizens across the northeast U.S. Efforts to date have slowed its spread, but regulatory agencies are limited financially and will continue to face limitations if funding remains static and spread continues. This committee could consider whether other federal agencies can assist USDA-APHIS-PPQ with funding and other resources in slowing the spread and finding better solutions.

Underserved Communities

Managing for Diversity and Inclusion, including underserved communities: NAISMA supports a culture of inclusion through all of our programs, communications, and work to support invasive species managers. NAISMA recognizes that the racist systems of North America's institutions have disadvantaged non-white ethnicities since Europeans colonized these lands. As a membership association and employer, we commit to resisting racism. We commit to fostering diversity.

Wildland Fire

NISC/WFLC Partnership memorandum: NISC recently signed a memorandum related to the Integrating and Coordinating Wildland Fire and Invasive Species Management Effort. This document included actions that NISC/WFLC could prioritize and undertake. NISC/WFLC could give an overview on the document; efforts to date and utilize ISAC to help further define implementation needs and ideas related to the partnership.

Additional Submissions

Some ISAC members submitted more than three priorities. Those extra submissions are included below along with an indication of their relevant category(ies). ISAC can decide whether and how to address these additional submissions.

Promoting greater understanding of the impacts of invasive species on native pollinators as well as addressing conflation between introduced managed honey bees and native pollinators as part of pollinator conservation effort. [Research and Assessment]

Advancing Tree Smart Trade recommendations to prevent the introduction of new forest pests. [Regions and Biomes, Policy and Institutions]

State invasive species listing on federal lists: Invasive species listed on a state noxious weed or harmful animals list, as defined by that state, should be screened for by DHS or USDA at US ports of entry. Invasive species can invade specific regions of the U.S. and its territories, but not be included on federal noxious weed or Lacey Act lists. Requiring federal agencies to address harmful species of concern in individual states may help states receive federal assistance to deal with their specific invasive species issues before they become interstate or nationwide problems. [Policy and Institutions]

USDA and DOI Strategic Plans: Review and discussion on difficulties with implementing the plan and needed updates to the current plans. How BIL funds are being used to implement the plans and processes departments are using to allocate the funds and implement and track success and failures. [Policy and Institutions]

Developing a structure for regional working groups to address invasive species: Although this is happening piecemeal through ANS regional panels, RISCCs and plant boards, it does not comprehensively provide a platform for regional collaboration between state invasive species managers and policy makers to set priorities and advance invasive species prevention and control efforts on a regional level. [Policy and Institutions, Regions and Biomes]

Contemporary strategic communication and change-oriented outreach: The NISC list of priorities includes focus on maintaining websites and the generic "raising awareness", but those have been shown to have limited impact in the contemporary media universe. NISC/ISAC can recommend that, rather than diluting the federal communication effort by spreading it spread among many agencies and many goals, a separate community of practice or a special office is created. Such entity should engage/employ not only scientist and administrators, but primarily communication specialists tasked with designing and executing campaigns for specific outcomes. [Outreach and Engagement]