

Responsive Management



NATIONAL AQUATIC INVASIVE SPECIES SURVEY

FINAL REPORT

**Conducted on behalf of the
U.S. Fish and Wildlife Service and the
International Association of Fish and Wildlife Agencies**

by Responsive Management

April 2002

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EXECUTIVE SUMMARY

This study was conducted on behalf of the U.S. Fish and Wildlife Service and the International Association of Fish and Wildlife Agencies (IAFWA) to identify various strategies and programs used within each state to address the problem of aquatic invasive species and to help increase awareness of the problems of aquatic invasive species with key policy makers. Other goals of the study were to help secure additional funding for each state, support the expansion of state authorities as needed, and help solidify the partnerships with appropriate federal agencies in addressing the problems of aquatic invasive species.

This study entailed a mail survey (returned via e-mail, regular mail, or facsimile) of the fish and wildlife agency director or proxy from each state and territory, including the District of Columbia and Puerto Rico. Responsive Management received a total of 44 responses to the survey. One aspect of the analysis involved examining the results among coastal and non-coastal states. Coastal states were defined as any state with a salt- or brackish-water shoreline.

IMPORTANCE/AWARENESS OF THE ISSUE OF AQUATIC INVASIVE SPECIES

All respondents indicated that the issue of aquatic invasive species was important, with a majority (57%) having indicated that it was very important. Most respondents felt that their awareness of both federal legislation (89%) and ongoing federal efforts (87%) addressing aquatic invasive species was medium, high, or very high. The aquatic invasive species that are of most concern include invasive fish, aquatic plants, mollusks, and fish pathogens.

AUTHORITY TO ADDRESS AQUATIC INVASIVE SPECIES

All respondents indicated that their agency had strategies in place to address aquatic invasive species. Almost all respondents (95%) indicated that state statutes give their agency the authority to address aquatic invasive species (including all respondents from coastal states), and a large majority (70%) indicated that administrative rules give their agency authority to address aquatic invasive species. Most respondents (66%) indicated that the fisheries program within their agency directed efforts to address aquatic invasive species.

A strong majority of all respondents (72%) said that their agency was *not* the only state agency with the legal authority to address aquatic invasive species (81% of respondents from coastal states, and 64% of respondents from non-coastal states). Of those who said that their agency was *not* the only state agency with the legal authority to address aquatic invasive species, 55% said that their agency was the lead agency with joint authority over aquatic invasive species, and 41% said that their agency was a cooperating management agency with joint authority over aquatic invasive species. Other agencies/entities and the focus areas within those agencies/entities that address aquatic invasive species (identified by respondents whose agency was *not* the only state agency with the legal authority to address aquatic invasive species) include state agriculture agencies, universities, state environmental protection agencies, state marine management agencies, state natural resources agencies, and state commerce agencies.

A large majority of respondents (79%) indicated that their agency has discretion to determine potential impacts of importing aquatic species, including ecological impacts. A very large percentage of respondents (93%) said that their agency has discretion to determine potential impacts of the release of aquatic species, including ecological impacts. In addition to ecological impacts, other criteria considered by the respondent's agency in making permitting decisions include economic factors (69%) and social factors (63%).

All respondents said their agency has the authority to address invasive mollusks and fish, and high percentages said their agency has the authority to address invasive crustaceans (88%), fish pathogens (83%), aquatic birds (74%), and amphibians (74%).

STRATEGIES/APPROACH TO MANAGING AQUATIC INVASIVE SPECIES

An overwhelming majority (98%) of respondents indicated that their agency considers the subject species' impact on native aquatic species and aquatic ecosystems when assessing whether the subject species should be identified and treated as an aquatic invasive species. Other important factors in considering whether the subject species should be identified and treated as an aquatic invasive species are its impact on recreational use of aquatic resources (86%) and its impact on commercial use of aquatic resources (67%). Respondents from non-coastal states

were more likely than respondents from coastal states to answer that recreational use of aquatic resources was used in assessing whether a species should be identified as an aquatic invasive species.

Slightly less than a majority of respondents (41%) said that their agency uses the American Fisheries Society Policy Statement on the Introduction of Aquatic Species as guidance for its decision-making process.

The majority of respondents (58%) indicated that their state uses a “limited approach” in addressing aquatic invasive species, and the remainder indicated that their state uses a “comprehensive approach.” A larger percentage of respondents from non-coastal states than from coastal states said their state uses a comprehensive approach. The most popular strategies to address aquatic invasive species are “regulatory strategies” and “educational strategies.” Also important are “management strategies” and “regional cooperative strategies.” In general, states used a mix of programmatic elements to address aquatic invasive species. The most popular programmatic elements (multiple responses allowed) are regulatory programs (95%), educational programs (79%), management programs (76%), and regional cooperative programs (74%). Non-coastal states are more likely than coastal states to participate in a regional cooperative program.

Majorities of respondents indicated that “detection and monitoring” (86%), “prevention” (84%) and “control” (78%) are elements of their management program to address aquatic invasive species. A slightly higher percentage of coastal than non-coastal states use “detection and monitoring” as an element of their management program, and a slightly higher percentage of non-coastal than coastal states use “prevention” as an element of their management program.

Strong majorities of respondents indicated that “importation” (95%), “enforcement authority and penalties” (88%), and “release for beneficial purposes” (77%) were areas in which their agency had regulatory powers as part of its regulatory program to address aquatic invasive species. A majority of respondents (56%) said that their agency uses a classification system as part of its regulatory program for aquatic invasive species. The classification system categories used by

various agencies as part of their regulatory programs to address aquatic invasive species include “prohibited” species, “regulated” species, and a “combination of prohibited, regulated, unregulated, and unlisted.”

The elements that respondents most frequently said best describe their agency’s educational program for addressing aquatic invasive species are public awareness (92%) and outreach (76%).

Exactly 50% of the 28 respondents to question 31 (the question was directed at coastal states, but some non-coastal states with large lakes and reservoirs also answered) indicated that their agency has an excellent (21%) or good (29%) relationship with the state Sea Grant Program. Another 29% said their agency has a fair relationship with the Sea Grant Program.

CHALLENGES TO MANAGING AQUATIC INVASIVE SPECIES

The obstacles that states face in addressing aquatic invasive species include limited funding, constraints on existing funding, federal constraints and “hoops” to access funding, and limited authority. Suggested improvements to the Lacey Act include lobbying for more funding, facilitating better coordination and communication between stakeholders, and using a regional approach to aquatic invasive species.

BUDGET/FUNDING TO ADDRESS AQUATIC INVASIVE SPECIES

Budgets to address aquatic invasive species vary widely among states. Typically, the mean budget allocation for management programs and regulatory programs is higher among coastal states than among non-coastal states; the mean budget allocation for educational programs is higher among non-coastal states than among coastal states. Sources of funding include license dollars, general fund monies, U.S. Fish and Wildlife Service funds, and user fees. The number of full-time employees dedicated to aquatic invasive species also varies among states. Coastal states tended to have more employees for management and regulatory programs and fewer employees for educational programs than did non-coastal states.

Support for the National Invasive Species Act was very high: 98% of respondents agreed (78% strongly agreed) that the IAFWA should try to increase funding for the Act when it is up for reauthorization this year.

Most respondents (70%) also indicated that their agency does not have the resources to develop an aquatic invasive species management plan without a guarantee of funding (i.e., there is no funding for the *development* of the plan). However, if the rules were changed to provide for funding for the development of an aquatic invasive species management plan, respondents overwhelmingly (92%) said that their agency would develop a program to address aquatic invasive species.

Currently, slightly more than half (58%) of respondents indicated that their agency has presented the problem of aquatic invasive species to their state legislature and/or governor. The most common ways that their agency presented the information to the legislature and/or governor was through informal conversations (52% having presented the information this way), written testimony (48%), informal presentation (44%), and/or verbal testimony (44%). The result of the presentation of information about aquatic invasive species to the legislature and/or governor most commonly was “increased awareness” (54%). However, concrete action was taken by some states: 27% of respondents said that the results of the presentation included new authority for addressing the issue, and 23% said the results included additional funding. Those agencies in coastal states were more likely to be granted new authorities as a result of the presentation of information: while 14% of agencies from non-coastal states were granted new authorities as a result of the presentation of information, 42% of agencies from coastal states were granted new authorities.

AGENCY INTEREST IN A NATIONAL MARKETING INITIATIVE

Interest in participating in a national marketing initiative to address aquatic invasive species was very high: 95% of respondents said their agency would be interested in participating in a national marketing initiative. Respondents said that the most valuable tools as part of a national marketing initiative would be brochures (83%), posters (76%), educational curriculum (71%),

public service announcements (68%), and assistance with a public awareness campaign (68%). All respondents expressed interest in using the information from this survey to inform their state's policy makers about the capabilities and needs of the state agencies that have the responsibility to address aquatic invasive species.

TABLE OF CONTENTS

Introduction and Methodology.....	1
Importance/Awareness of the Issue of Aquatic Invasive Species.....	2
Authority to Address Aquatic Invasive Species.....	6
Strategies/Approaches to Address Aquatic Invasive Species	25
Challenges to Address Aquatic Invasive Species	40
Budget/Funding to Address Aquatic Invasive Species	44
Agency Interest in a National Marketing Initiative.....	58
Titles of Those Completing the Survey	62

INTRODUCTION AND METHODOLOGY

This study was conducted on behalf of the U.S. Fish and Wildlife Service (USFWS) and the International Association of Fish and Wildlife Agencies (IAFWA) to identify various strategies and programs used within each state to address the problem of aquatic invasive species and to help increase awareness of aquatic invasive species with key policy makers. Other goals of the study were to help secure additional funding for each state, support the expansion of state authorities as needed, and help solidify the partnerships with appropriate federal agencies in addressing the problems of aquatic invasive species.

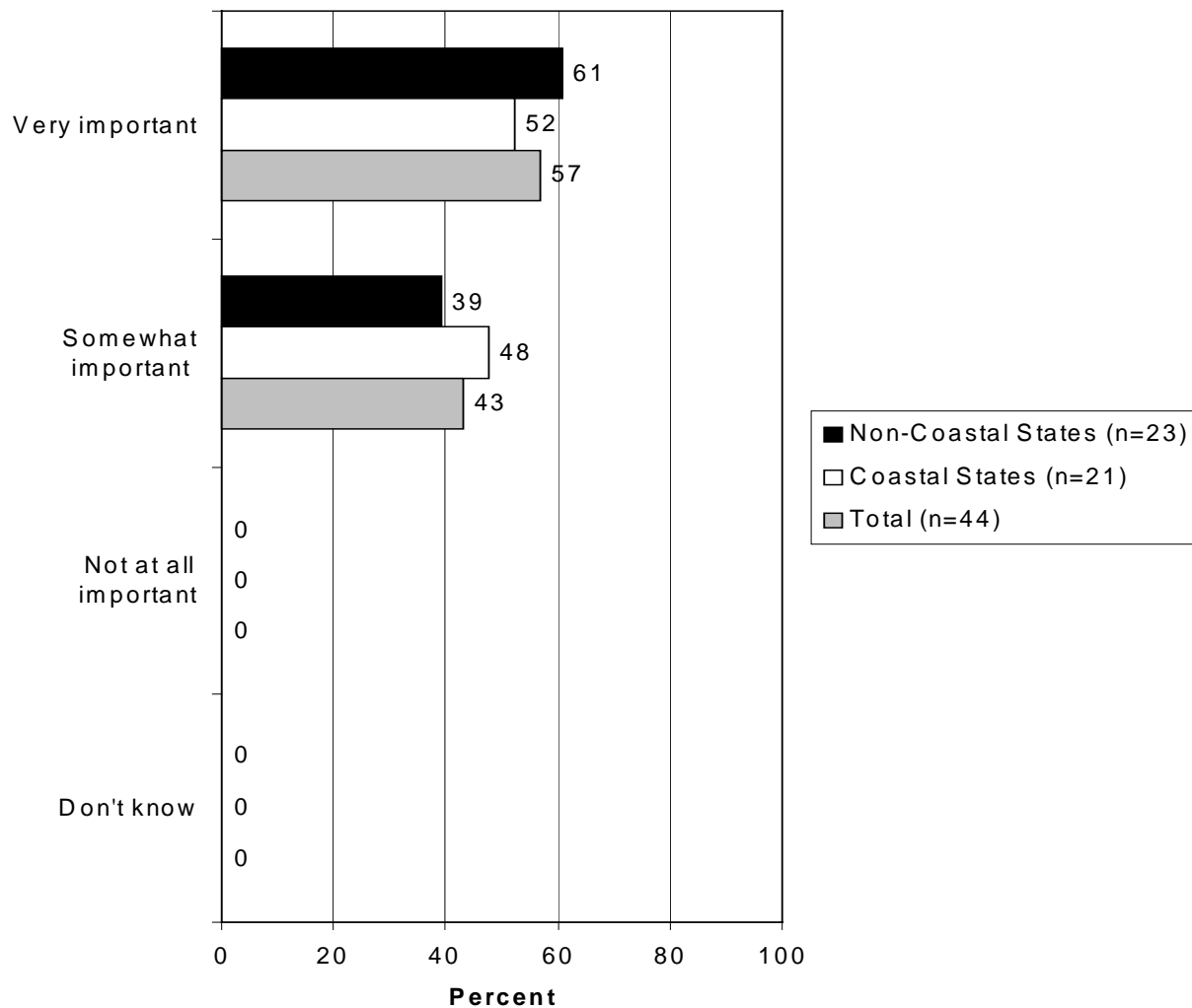
This study entailed a mail survey (returned via e-mail, regular mail, or facsimile) of the fish and wildlife agency director or proxy from each state and territory, including the District of Columbia and Puerto Rico. Responsive Management received a total of 44 responses to the survey. One aspect of the analysis involved examining the results among coastal and non-coastal states. Coastal states were defined as any state with salt- or brackish-water shorelines.

Throughout this study and survey, the terms “aquatic invasive species” and “aquatic nuisance species” are used interchangeably.

IMPORTANCE/AWARENESS OF THE ISSUE OF AQUATIC INVASIVE SPECIES

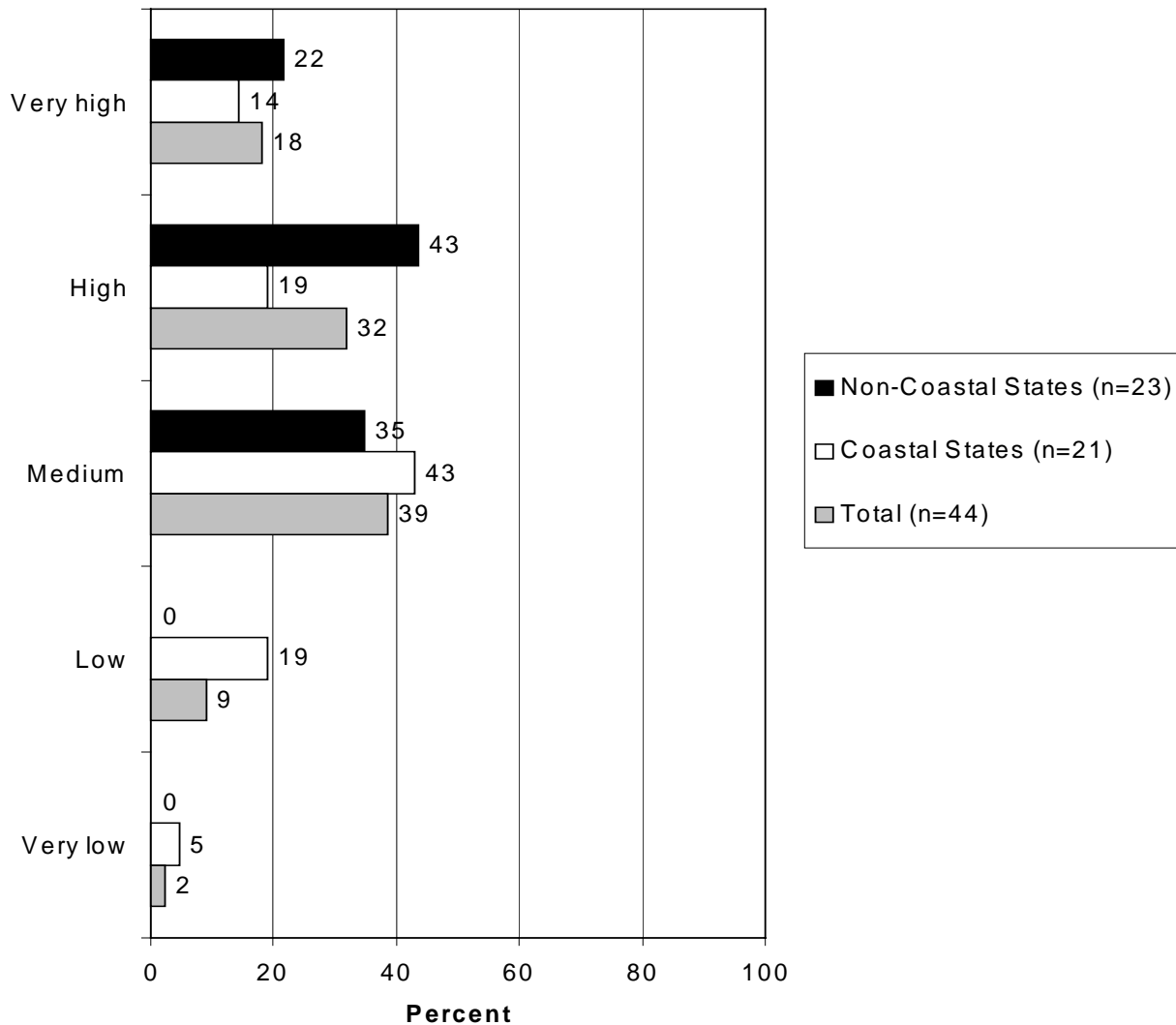
All respondents indicated that the issue of aquatic invasive species was important, with a majority (57%) having indicated that it was very important. A greater percentage of respondents from non-coastal states indicated that the issue of aquatic invasive species was *very* important than did respondents from coastal states.

Q1. First, how important is the issue of aquatic invasive species to your agency?



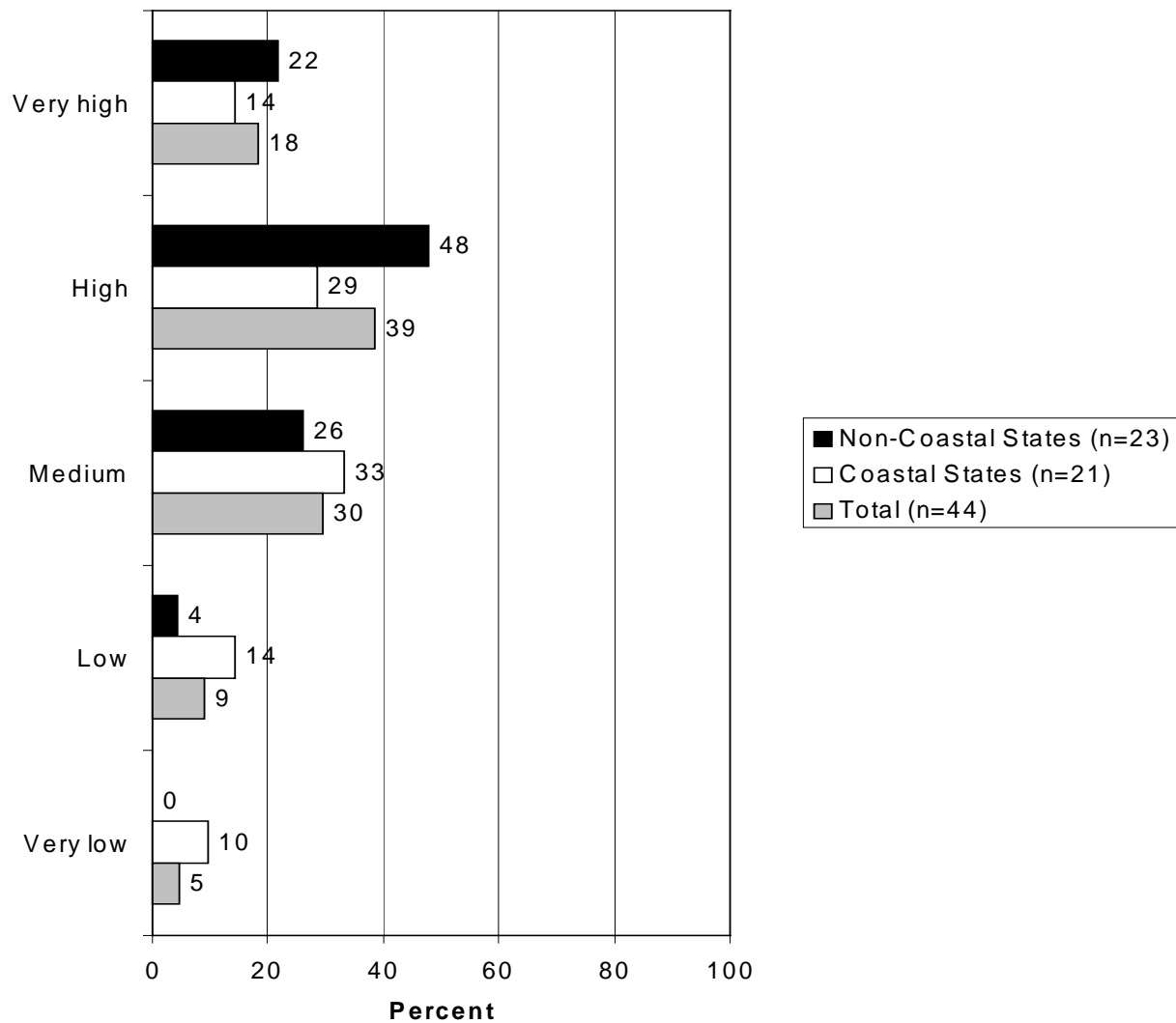
Most respondents (89%) felt that their awareness of federal legislation addressing aquatic invasive species was medium, high, or very high; few rated their awareness of federal legislation as low. Those from non-coastal states indicated greater awareness than did respondents from coastal states: 65% of non-coastal respondents, but only 33% of coastal respondents, said their awareness was high or very high.

Q2. How would you rate your level of awareness of federal legislation dealing with aquatic invasive species?



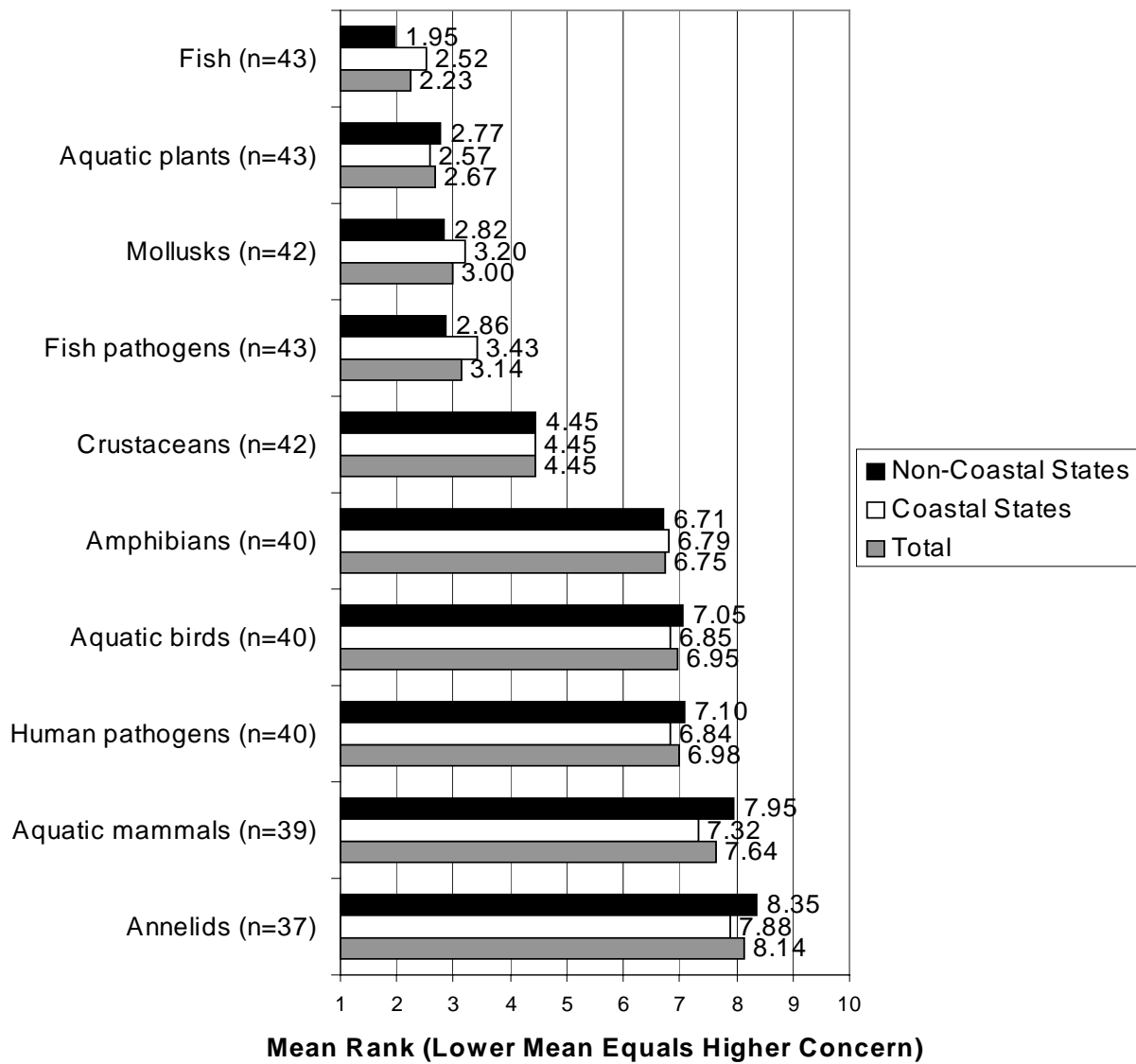
Most respondents (87%) rated their level of awareness of ongoing federal efforts at addressing aquatic invasive species as medium, high, or very high. Non-coastal respondents indicated greater level of awareness than did coastal respondents: 70% of non-coastal respondents, but only 43% of coastal respondents, rated their awareness of ongoing federal efforts as high or very high.

Q3. How would you rate the level of your awareness of ongoing federal efforts dealing with aquatic invasive species?



The aquatic invasive species that are of most concern are shown in the graph below, ranked from the species about which there is the most concern to the least. Invasive fish, aquatic plants, mollusks, and fish pathogens are of the most concern to both non-coastal and coastal states.

Q25. Thinking about the primary aquatic invasive species concerns for your state, please rank the following where 1 indicates a very high concern and 10 indicates a very low concern in your state.



AUTHORITY TO ADDRESS AQUATIC INVASIVE SPECIES

The tabulation below shows respondents' answers to Question 32 regarding the responsibilities regarding aquatic invasive species and the Lacey Act.

Q32. Under powers granted by Congress through the Federal Lacey Act, the USFWS designates harmful species as Injurious Wildlife and regulates importation and interstate transportation of those wildlife species. In representing your state agency, what are your perceptions of these responsibilities?

Perceptions of Responsibilities Regarding Aquatic Invasive Species and the Lacey Act

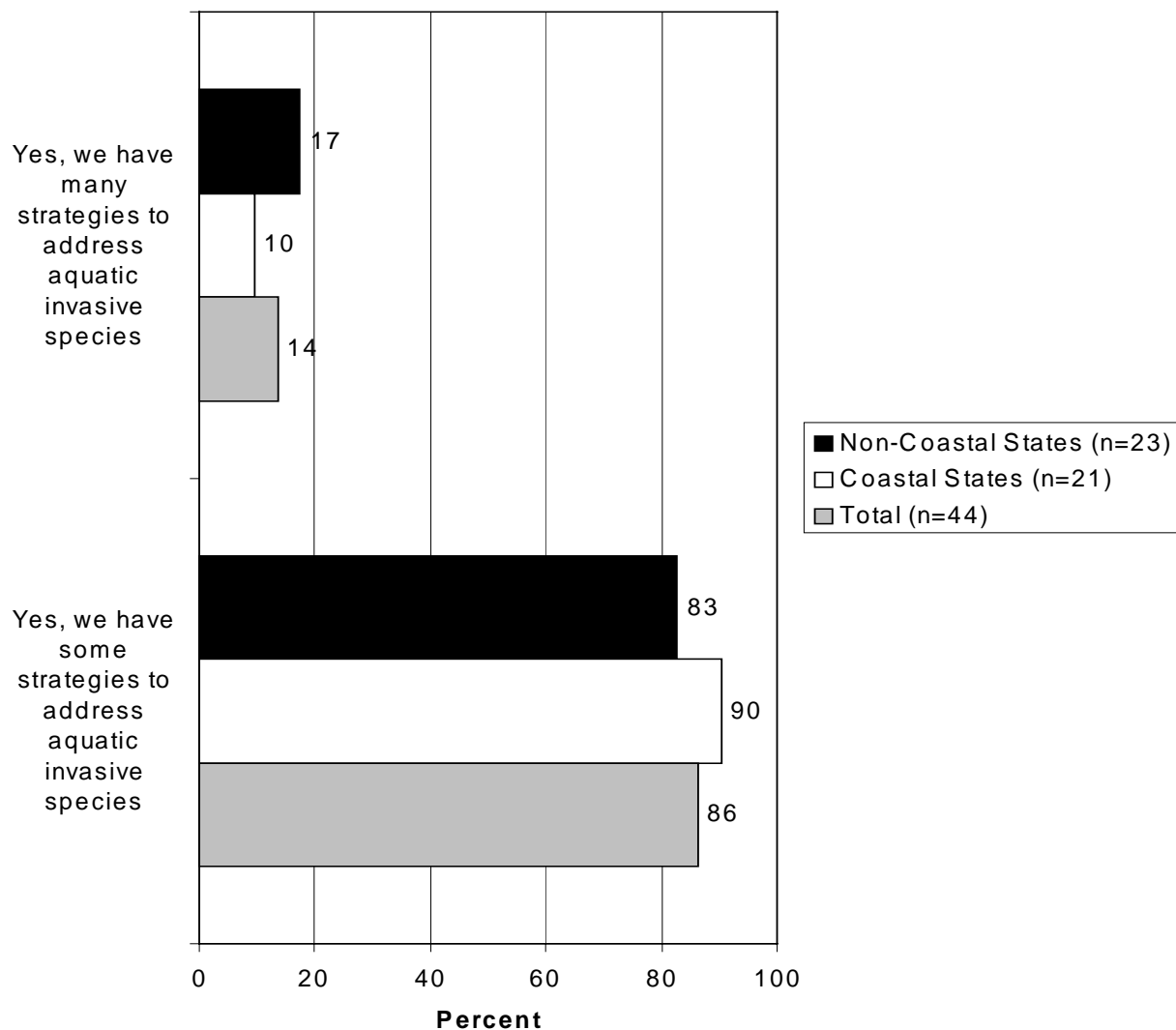
A good tool is sometimes neutralized by political action.
All of our involvement with the Lacey Act have involved exports, not imports.
Supportive of state authorities.
Designation of controversial species petitions; preventing destructive species from being imported.
Efforts to stop the westward spread of zebra mussels is commendable. Similar initiatives for other species are needed.
Federal agencies are the primary enforcers.
USFWS should maintain list of injurious species that includes explanation of why species is on list, make it available to public, and provide funds, training, and information to address problem species.
Have the authority to designate species and then to enforce the regulations on transportation and importation.
I believe Lacey Act is not nearly strong enough and requires state authority/work before it can become efficient.
I don't know much about this; I work with USFWS regarding ESA-listed species, I don't work with them on injurious wildlife.
I have only a vague idea about the Lacey Act and the USFWS roles relative to this act and ANS species.
It's like closing the door after the damage is done.
Lacey Act isn't utilized by Service as frequently as it should be to prevent movement of injurious wildlife around the country.
Limited - not enough safe measures taken to prevent AIS introduction.
Little coordination with State and USFWS on these responsibilities. Fish stocking needs to be included.
More care needs to be exercised in granting permission to possess animals that have ability to migrate to other states.
More species should be designated as threats. Little has been done to address interstate transport of zebra mussels.
My perception is that USFWS isn't addressing aquatic invasive species in my state.

**Perceptions of Responsibilities Regarding Aquatic Invasive Species and the Lacey Act
(continued)**

Not sure.
Not well understood by state agencies and unsure how to rely on USFWS to prohibit importation into state waters.
Role of USFWS is complementary and compatible with our state efforts.
We work cooperatively to control new importation of exotic problem species; notify USFWS of Lacey Act violations.
The Feds must provide screening on what is allowed into the U.S. Injurious species should not be allowed in the U.S.
There is very little regulatory action by USFWS but a strong program of prevention by education and awareness.
These responsibilities are important in addressing problems. Invasive species don't respect state borders.
The regulations are inconsistently applied at state points of entry. There is no coordination with State Aquatic Species Coordinator.
This is a very important Federal law. We've used it on numerous occasions to prosecute illegal import of non-aquatic species.
Though good, Lacey Act provides virtually no help to our state.
To work with each state to ensure maximum protection against invasive aquatic species.
Too little is done in designating nuisance species. Regulation of interstate transportation is difficult.
Unaware of responsibilities as it relates to the Act.
Use of Lacey Act has been unnecessarily limited. Seeking further authorities (per NIS plan) is premature.
USFWS does a reasonably good job at managing importation and transportation of wildlife.
USFWS has been given a large responsibility and few resources to attend to that responsibility in the manner it deserves.
USFWS hasn't played a role in control of aquatic nuisance. Have provided funding to our state's ANS management through NISA.
National list is difficult to create and/or enforce. Needs to be a regional breakdown with common environmental conditions.
Not familiar with Act.
USFWS responsible to assist states preventing establishment of species that may cause harm to wildlife, citizens, and natural resources.

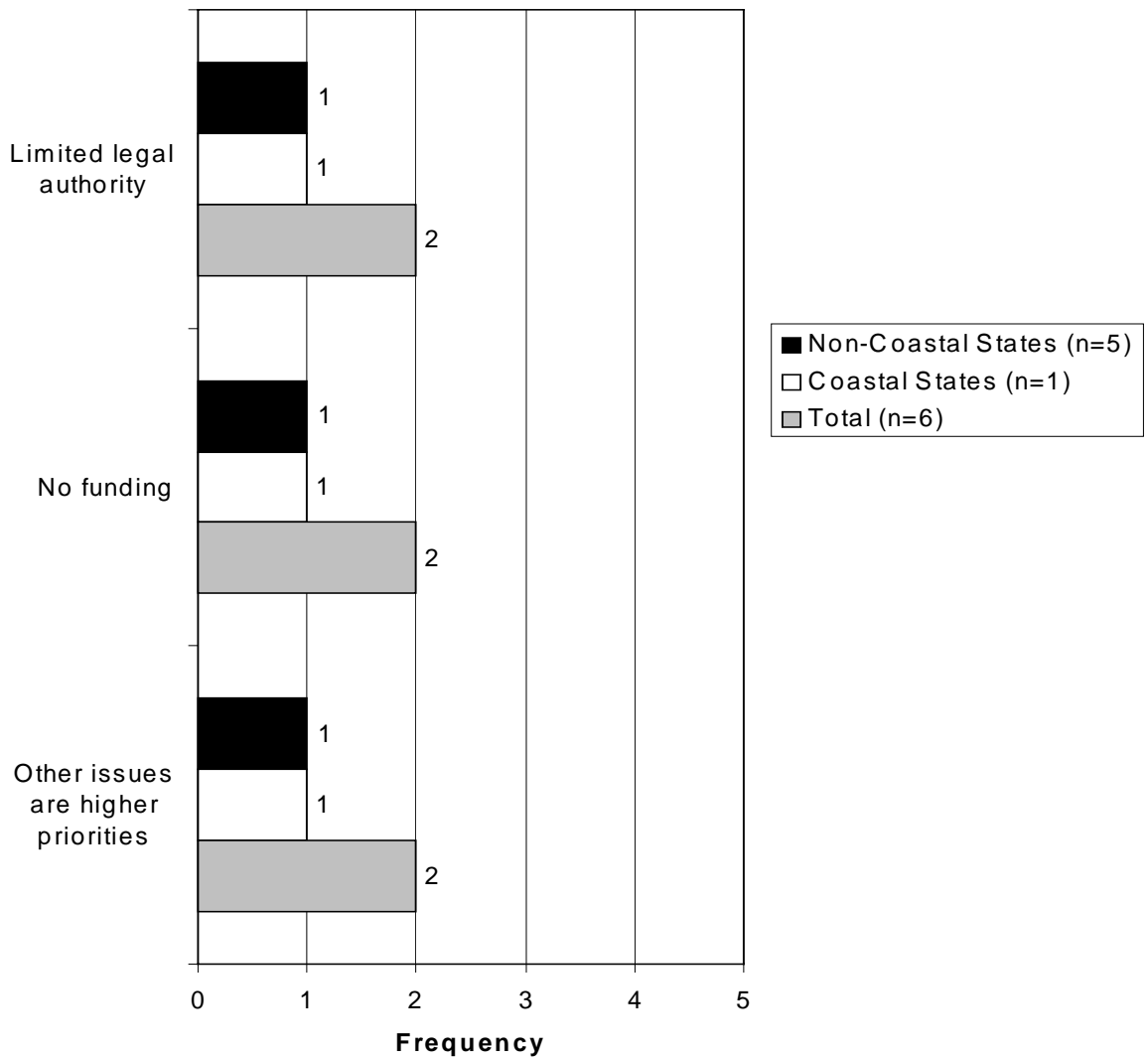
All respondents indicated that their agency had strategies in place to address aquatic invasive species, with 86% having indicated that their agency had *some* strategies to address aquatic invasive species, and 14% having indicated that their agency had *many* strategies. Slightly more non-coastal respondents than coastal respondents indicated that their state had *many* strategies to address aquatic invasive species.

Q4. Does your agency address the issue of aquatic invasive species?



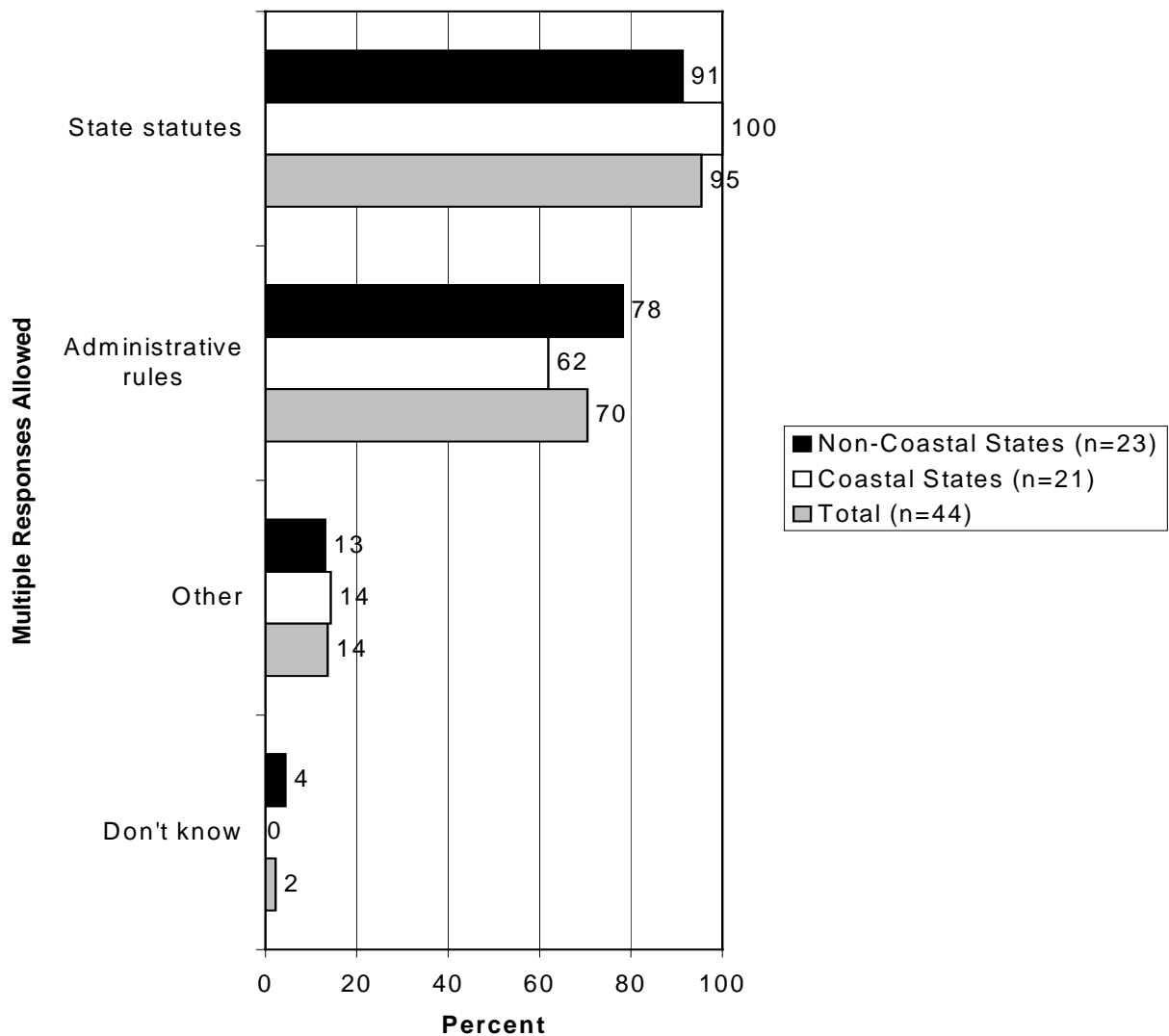
Question 5 was meant to be answered only by those who had answered in the previous question that their agency had no strategies to address aquatic invasive species; nonetheless, 3 of the 6 respondents answered Question 5 without having answered “no” to Question 4. Some of the responses given below, therefore, should be considered as reasons that the agency does not do *more* to address aquatic invasive species.

Q5. If no to Q4, please check the reasons why your agency does not address this issue and indicate what state agency has the lead role of addressing aquatic invasive species issues.



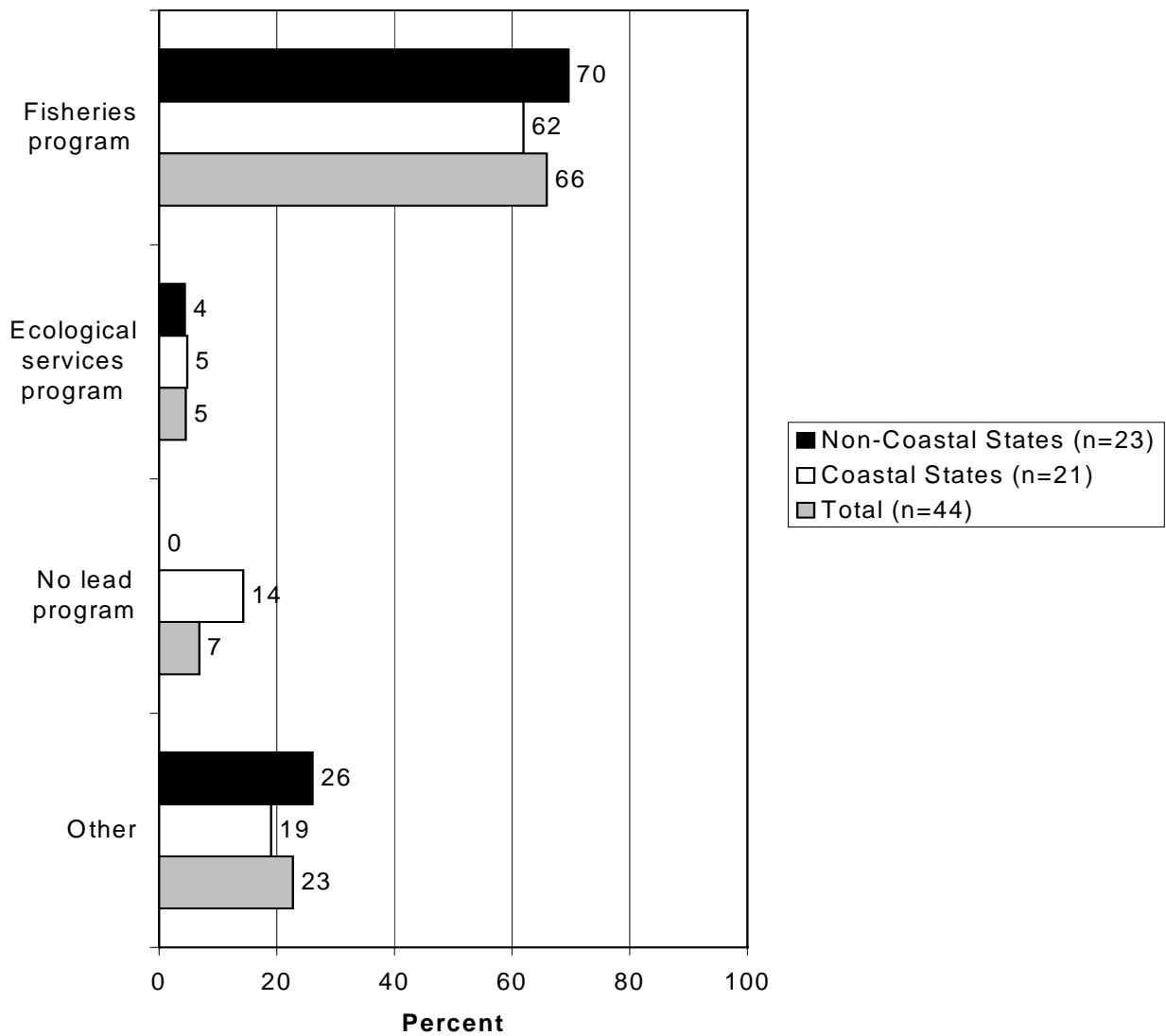
Almost all respondents (95%) indicated that state statutes give their agency the authority to address aquatic invasive species, including all of the coastal respondents, and a large majority of all respondents (70%) also indicated that administrative rules gives their agency authority to address aquatic invasive species. Authorities in the “other” category include agency/state policies and regulations or the state constitution.

Q6. If yes to Q4, what general authorities grant your agency the ability to address the aquatic invasive species issue?



Most respondents (66%) indicated that the fisheries program within their agency directed efforts to address aquatic invasive species, including 70% of coastal respondents and 62% of non-coastal respondents. Other programs that direct efforts regarding aquatic invasive species are shown in the tabulation that follows the graph.

Q8. If yes to Q4, what program within your agency directs efforts to address aquatic invasive species?

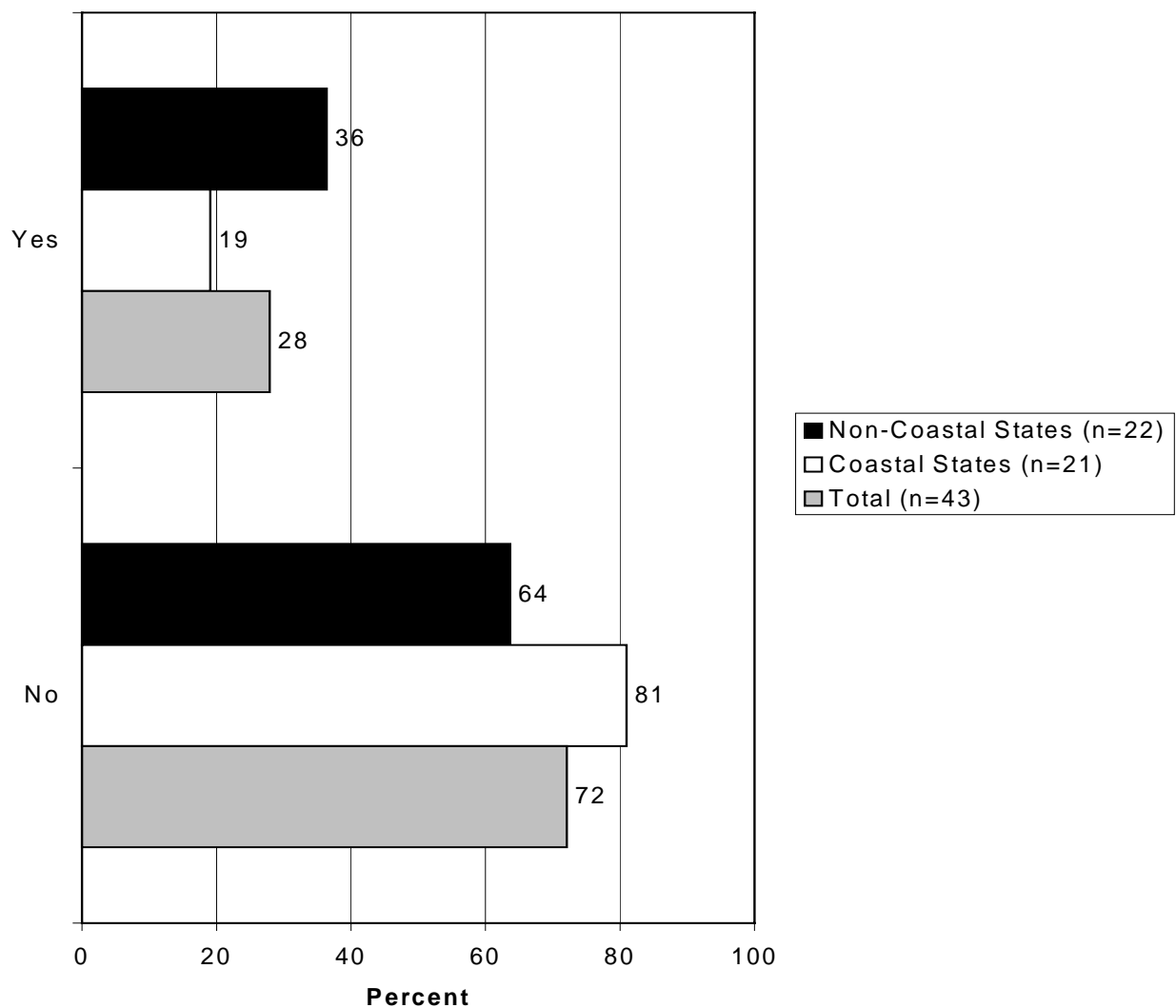


Other Programs That Address Aquatic Invasive Species

Aquatic Nuisance Species Program.
Combined effort between fisheries, game, and nongame programs.
Department of Environmental Quality.
Environmental Services.
Fisheries program.
Fisheries program addresses aquatic invasive species—control of sea lamprey and monitoring of introduction/spread through Great Lake.
Habitat Conservation Planning.
Harmful Exotic Species Management Program.
Information and Education.
Lakes Management Program, Geological and Natural History Survey, Boating Division.
Species Conservation.
Three separate divisions have specific responsibilities (vegetation, freshwater, saltwater).
Watershed Management (Fisheries and Endangered Resources also are involved).
We have an ANS project; however, the habitat and land management divisions also address ANS.
Wildlife and Heritage Program - DNR, Chesapeake Bay Program - Federal/State.

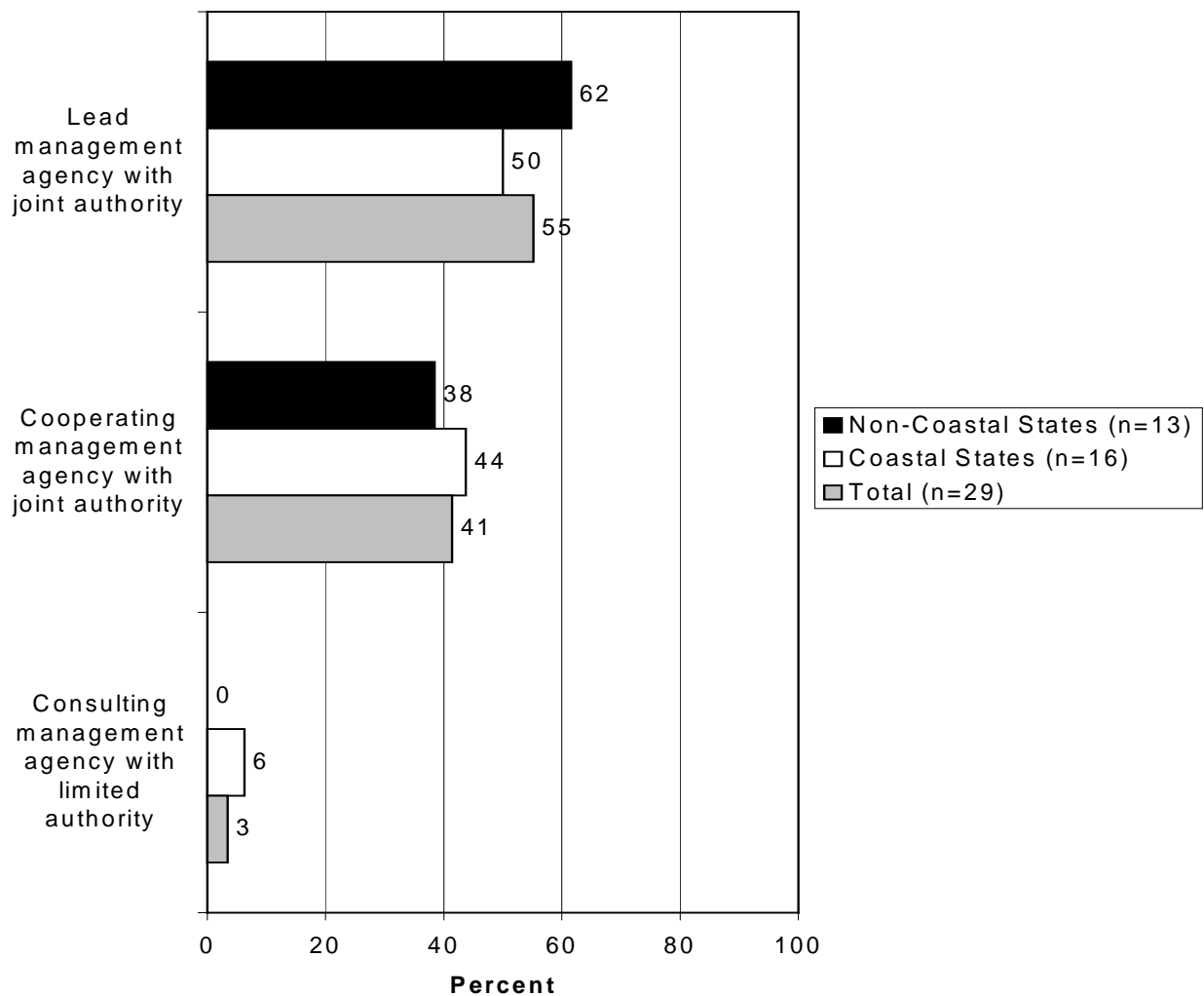
A strong majority (72%) said that their agency was *not* the only state agency with the legal authority to address aquatic invasive species issues, and that percentage was even higher among coastal states (81%). Among non-coastal states, 64% said their agency was *not* the only state agency with legal authority to address aquatic invasive species issues.

Q27. Is your agency the only state agency with the legal authority to address aquatic invasive species issues?



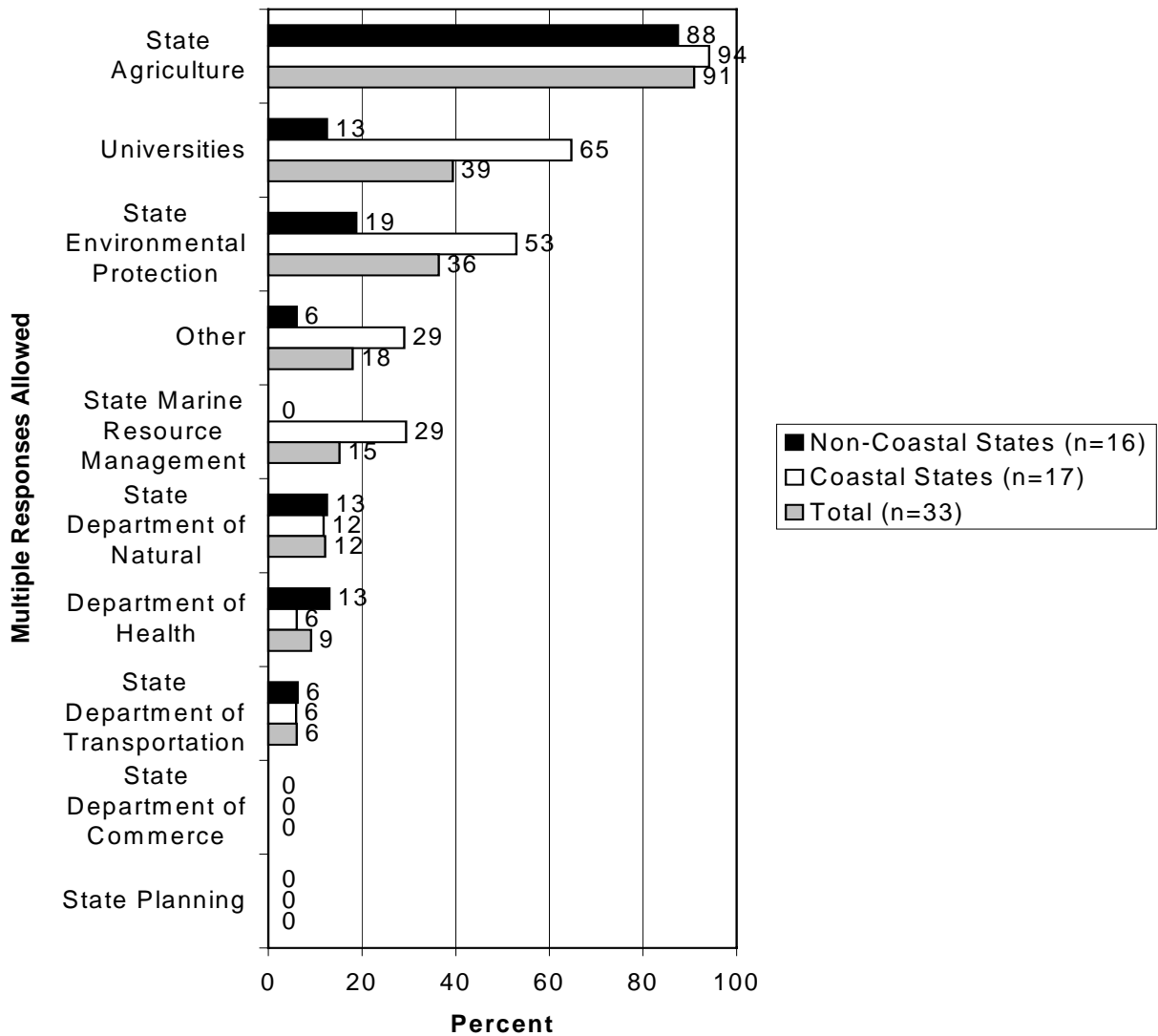
Of those who said that their agency was *not* the only state agency with the legal authority to address aquatic invasive species issues, 55% said that their agency was the lead agency with joint authority over aquatic invasive species, and 41% said that their agency was a cooperating management agency with joint authority over aquatic invasive species. A higher percentage of respondents from non-coastal states than from coastal states reported that their agency was the lead management agency.

Q28. If no to Q27, what phrase best describes your agency's relative position in your state when addressing aquatic invasive species issues?



Other agencies that address aquatic invasive species are shown in the following graph and tabulation, reported by those who said that their agency was *not* the only state agency with legal authority to address aquatic invasive species issues. Note that universities and state environmental protection agencies are much more involved in aquatic invasive species in coastal states than they are in non-coastal states.

Q29. If no to Q27, what are the other agencies (if any) that address the aquatic invasive species issue?



Those who checked “other” in question 29 (previous page) were asked to list the other agencies that address aquatic invasive species. Their answers are shown below.

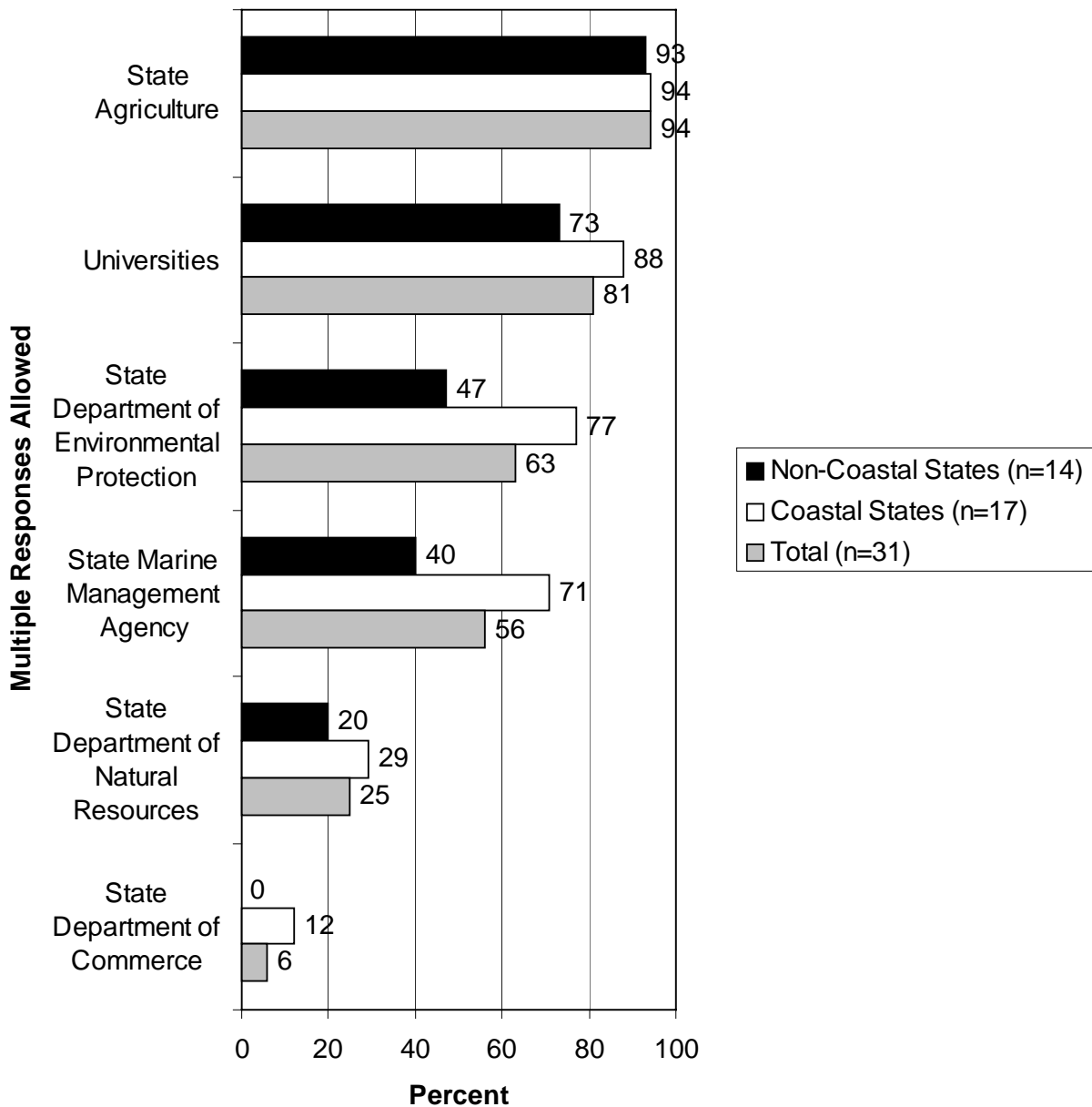
Other Agencies That Address Aquatic Invasive Species

Boating and Waterways, Water Resources
Department of State (Coastal Zone Management Program)
Dept. of Parks and Recreation (Plants)
Extension
Sea Grant Great Lakes Fishery Commission; Great Lakes Commission / ANS Panel

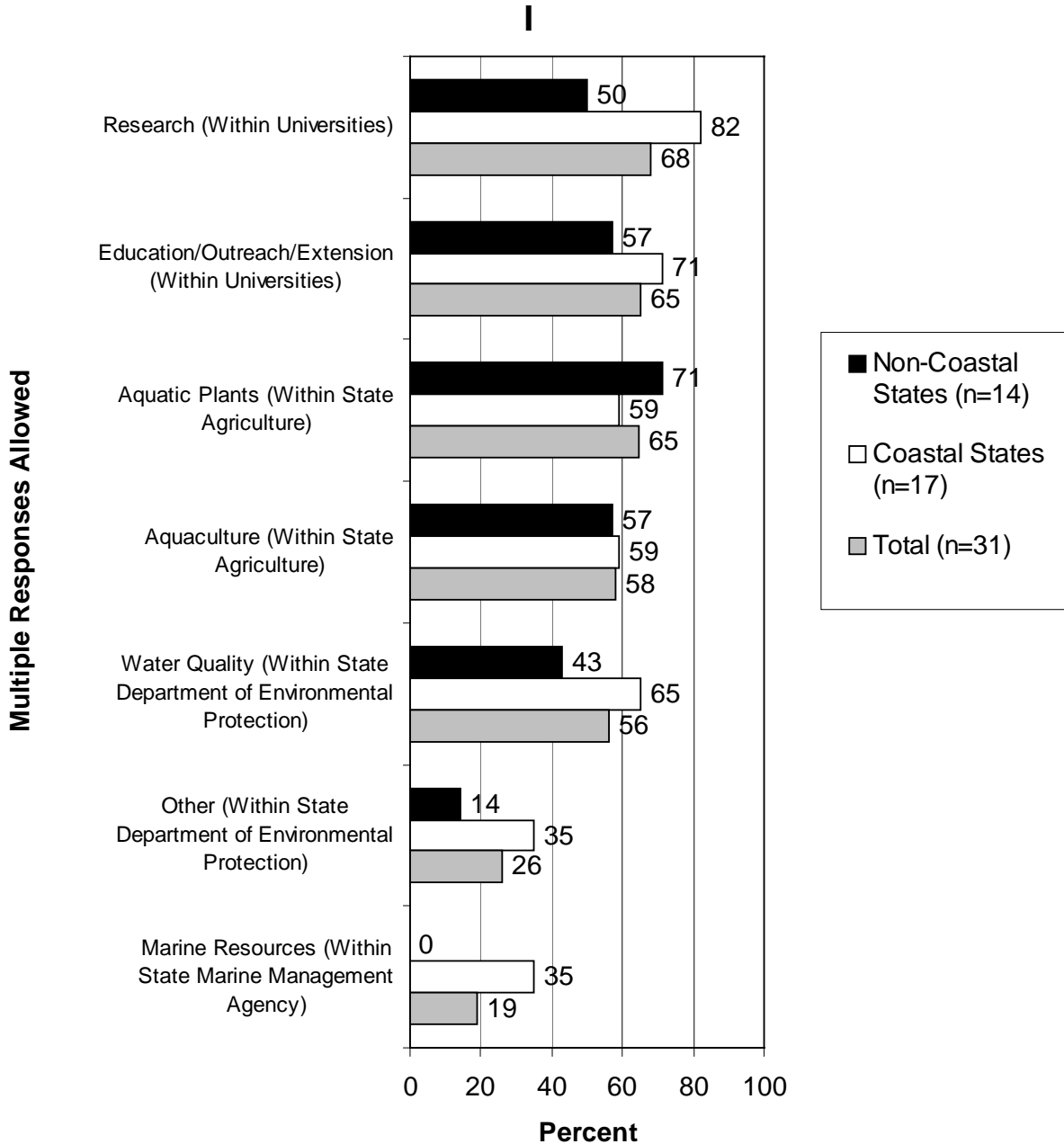
The survey then asked about other agencies/entities and programs/focus areas with which the respondent's agency worked, and the survey prompted them with lists of programs and focus areas. When prompted with an illustrative list of focus areas, more respondents to question 30 indicated that certain entities worked with their agency than had indicated in question 29. It may be that only after prompting did the respondent remember that the subject agency had a role in addressing aquatic invasive species. For instance, a greater percentage of respondents indicated in question 30 that universities worked with their agency than indicated in question 29 that universities worked with their agency: in question 30, 81% of respondents said that their agency worked with universities; in question 29, only 39% said their agency worked with universities.

Other agencies/entities that address aquatic invasive species (identified by respondents whose agency was *not* the only state agency with the legal authority to address aquatic invasive species issues) include state agriculture agencies (94% said their agency worked with an agriculture agency), universities (81%), state environmental protection agencies (63%), state marine management agencies (56%), state natural resources agencies (25%), and state commerce agencies (6%). The focus areas within each of those agencies/entities is shown in following graphs, as well.

Q30. If no to Q27, what are the state agencies that you cooperate or consult with and what are the general focus areas of these other agencies/entities.

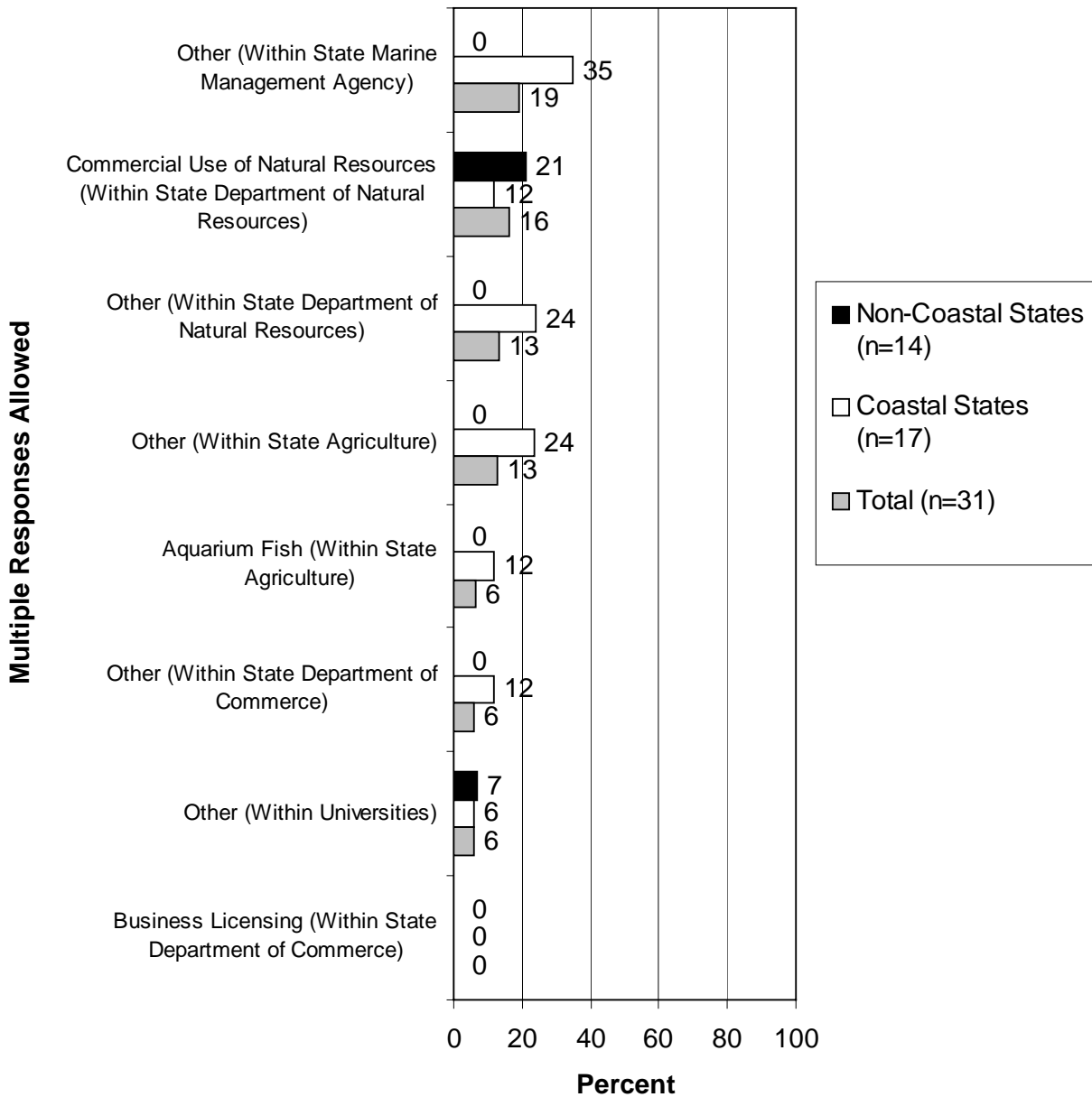


Q30. If no to Q27, what are the state agencies that you cooperate or consult with and what are the general focus areas of these other agencies/entities.



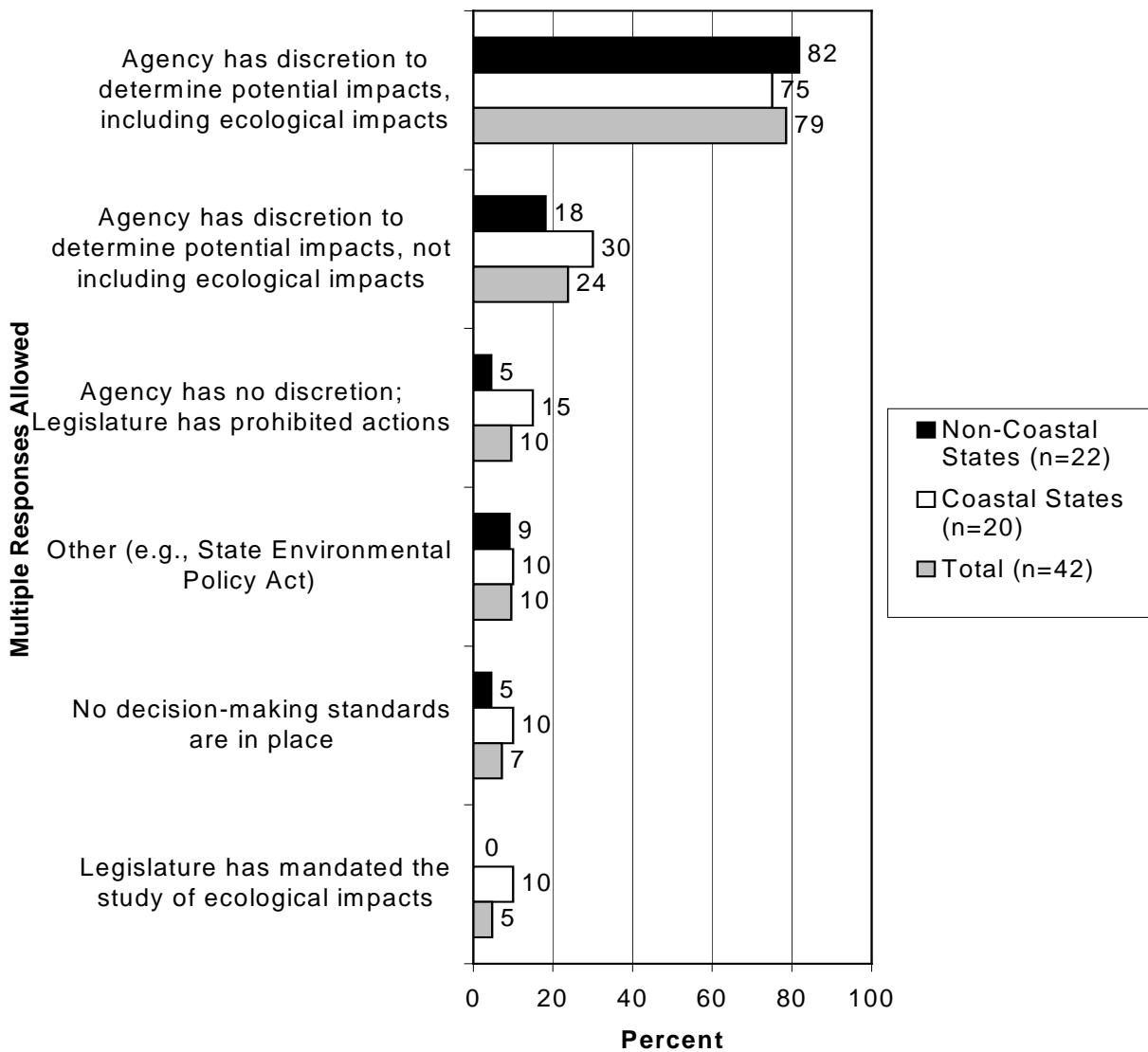
Q30. If no to Q27, what are the state agencies that you cooperate or consult with and what are the general focus areas of these other agencies/entities.

II



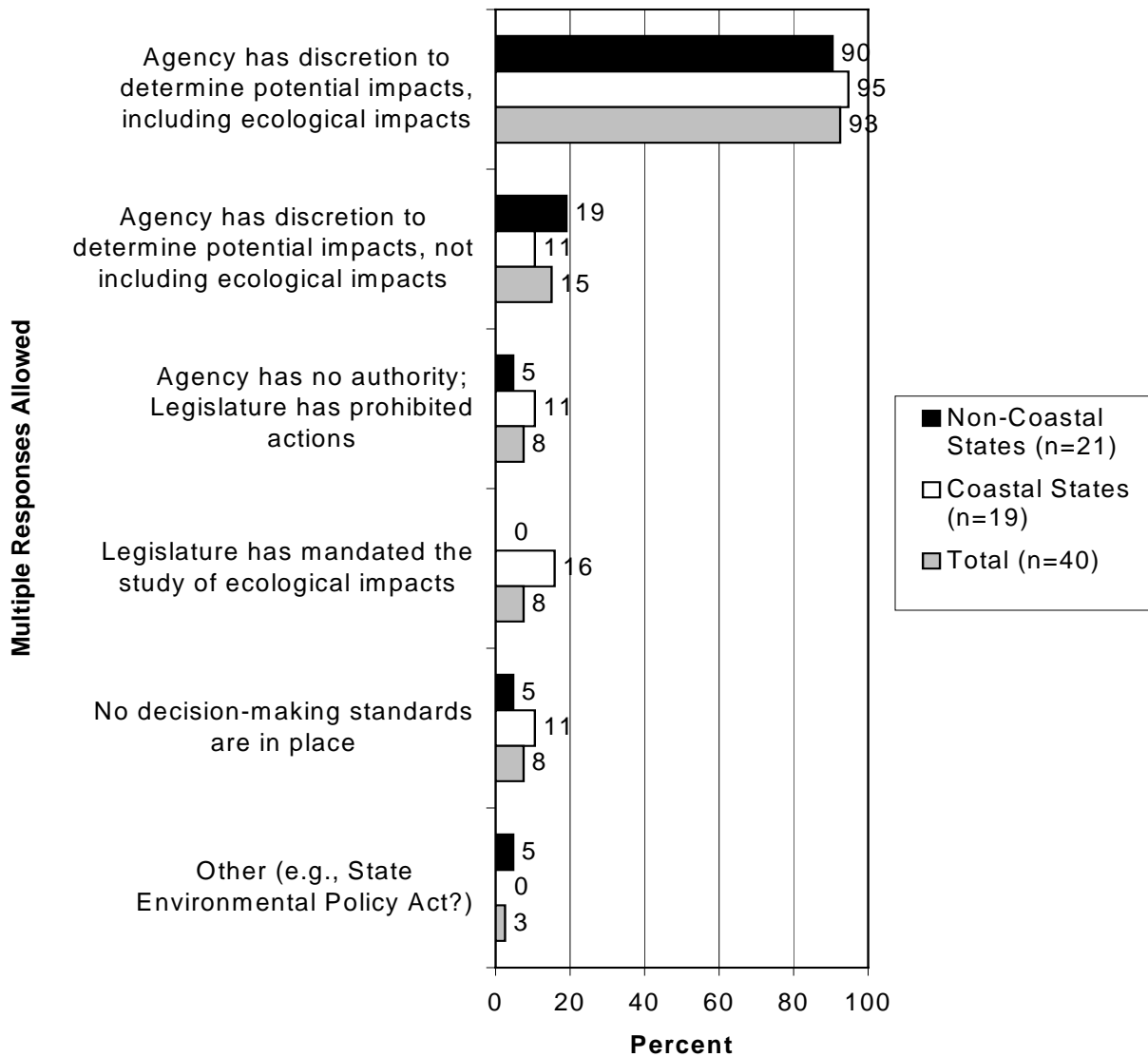
Regarding the importation of aquatic species, a large majority of respondents (79%) indicated that their agency has discretion to determine potential impacts of importing aquatic species, including ecological impacts.

Q18. If your agency regulates the importation of aquatic species, what decision-making standards (legally imposed or adopted standards) are used?



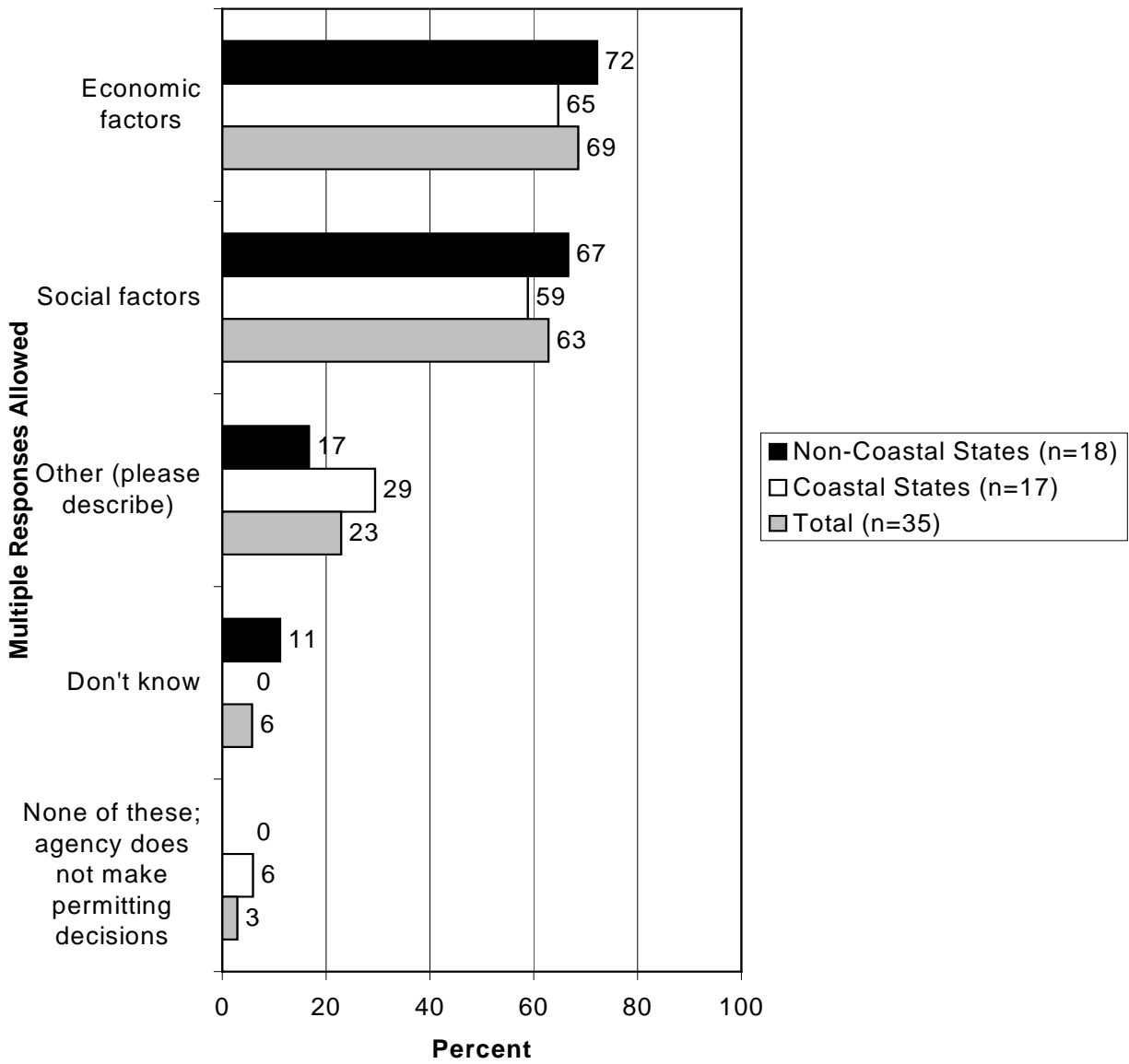
A very large percentage of respondents (93%) said that their agency has discretion to determine potential impacts of the release of aquatic species, including ecological impacts.

Q19. If your agency regulates the release of aquatic species, what decision-making standards (legally imposed or adopted standards) are used?



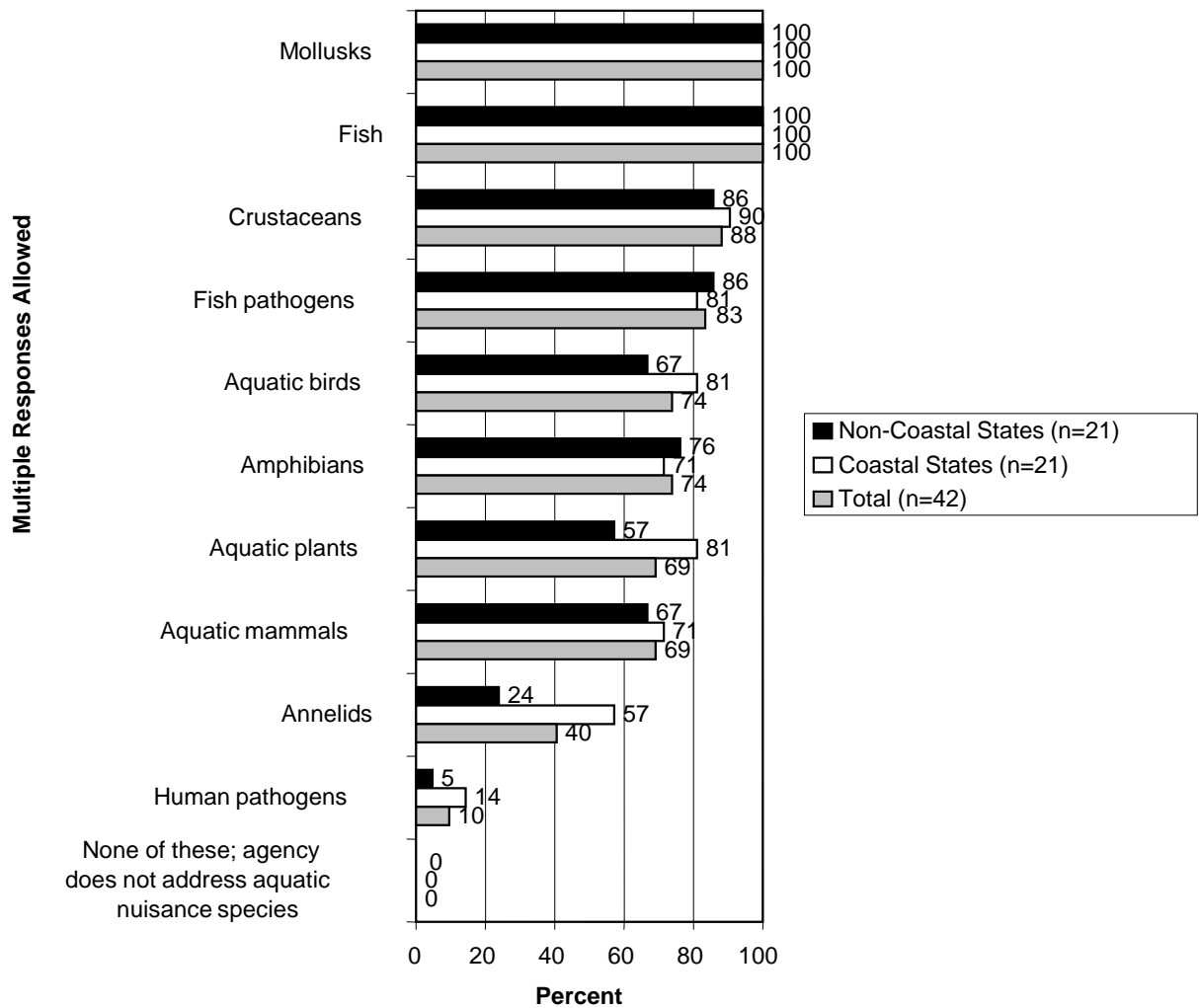
In addition to ecological impacts, other criteria considered by the respondent’s agency in making permitting decisions include economic factors (69%) and social factors (63%).

Q20. Besides ecological impacts, what other criteria does your agency use to make its permitting decisions?



The graph below shows the types of aquatic invasive species that the subject agencies have the authority to address. All respondents said their agency has the authority to address invasive mollusks and fish, and high percentages said their agency has the authority to address invasive crustaceans (88%), fish pathogens (83%), aquatic birds (74%), and amphibians (74%). Of particular note is that higher percentages of agencies from coastal states than from non-coastal states have the authority to address aquatic birds, aquatic plants, and annelids.

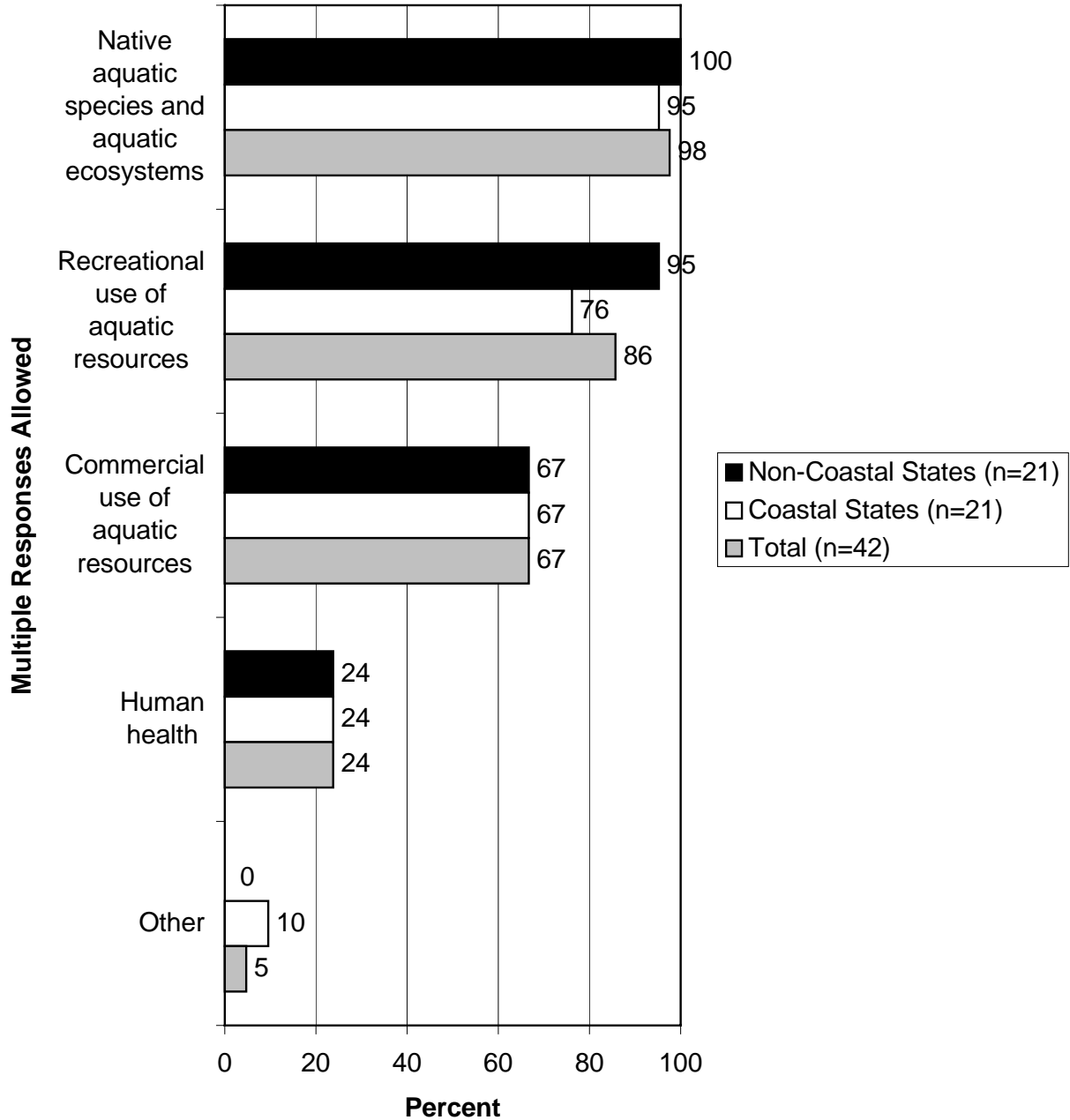
Q26. Which of the following aquatic invasive species concerns does your agency have the authority to address?



STRATEGIES/APPROACHES TO ADDRESS AQUATIC INVASIVE SPECIES

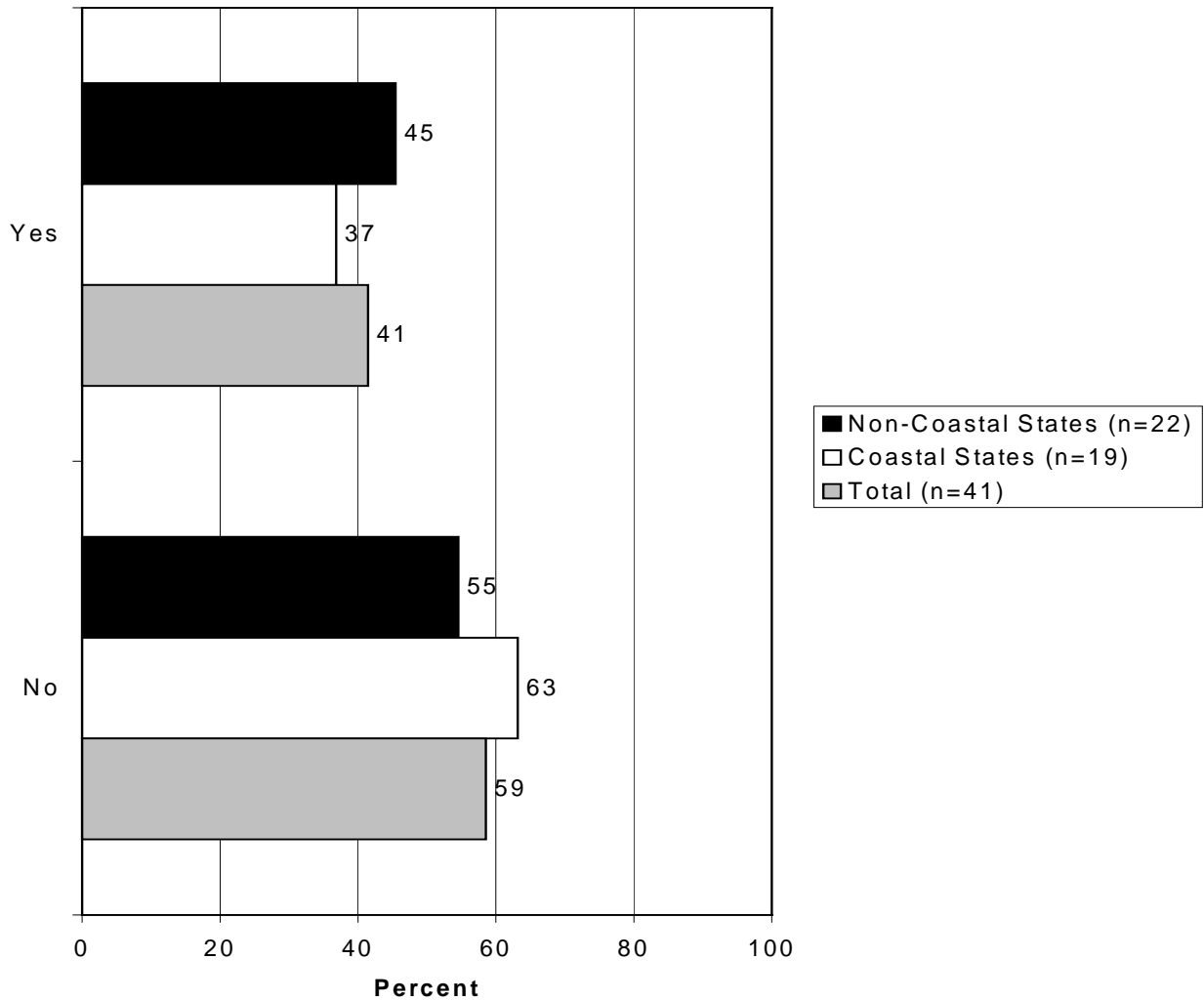
An overwhelming majority of respondents (98%) indicated that their agency considers the subject species' impact on native aquatic species and aquatic ecosystems when assessing whether the subject species should be identified and treated as an aquatic invasive species. Other important factors in considering whether the subject species should be identified and treated as an aquatic invasive species are its impact on recreational use of aquatic resources (86%) and its impact on commercial use of aquatic resources (67%). Respondents from non-coastal states were more likely than respondents from coastal states to answer that recreational use of aquatic resources was used in assessing whether a species should be identified as an aquatic invasive species. This graph appears on the following page.

Q24. How does your agency assess whether a species should be identified or treated as an aquatic invasive species? Would you say that non-native aquatic species are designated a nuisance based on their impact to:



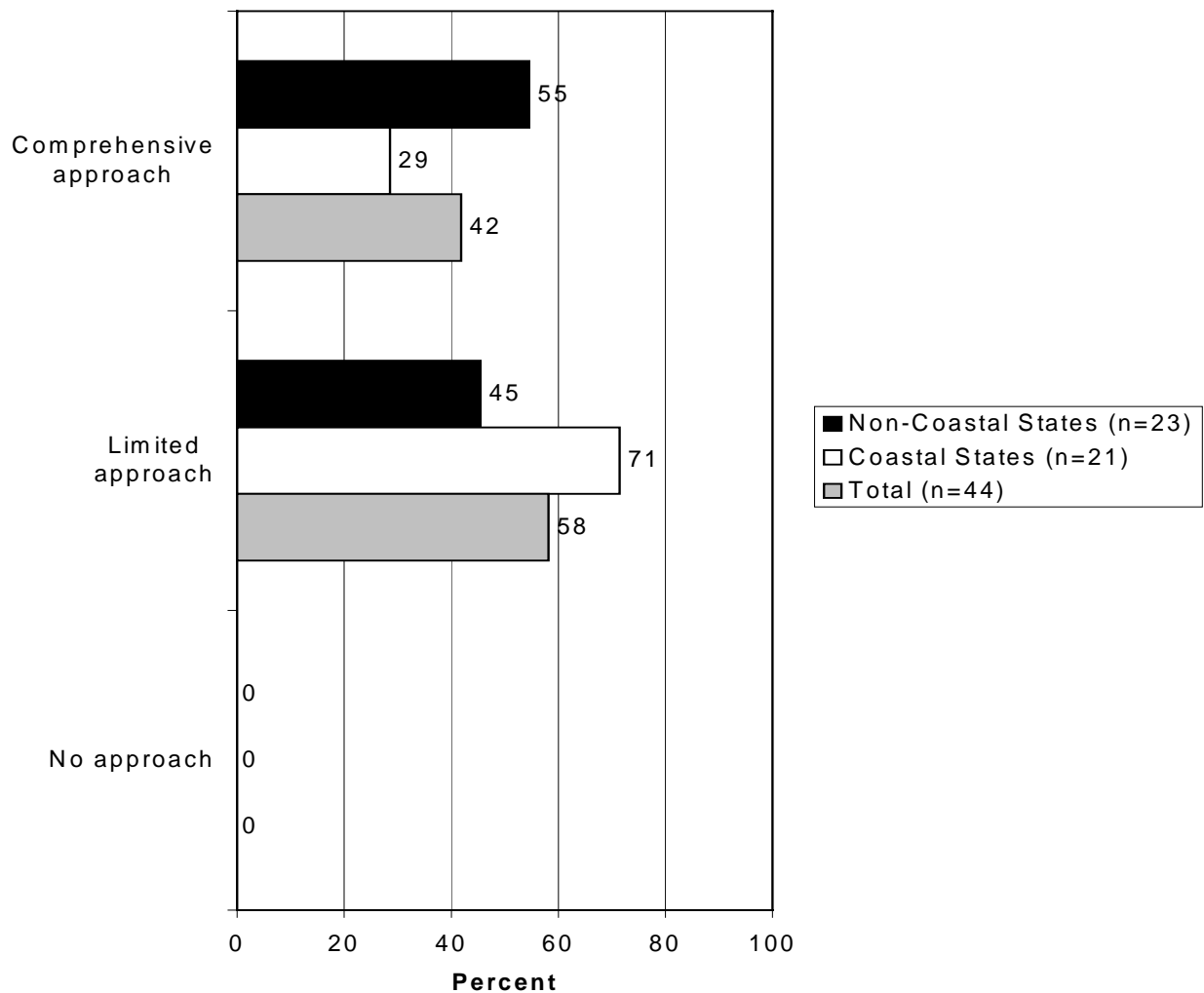
Slightly less than a majority of respondents (41%) said that their agency uses the American Fisheries Society Policy Statement on the Introduction of Aquatic Species as guidance for its decision-making process. In looking at the coastal/non-coastal breakdown, 45% of non-coastal and 37% of coastal respondents indicated that their state agency uses the American Fisheries Society Policy Statement on the Introduction of Aquatic Species for its decision-making process.

Q17. Does your agency use the American Fisheries Society Policy Statement on the Introduction of Aquatic Species as guidance for its decision-making processes?



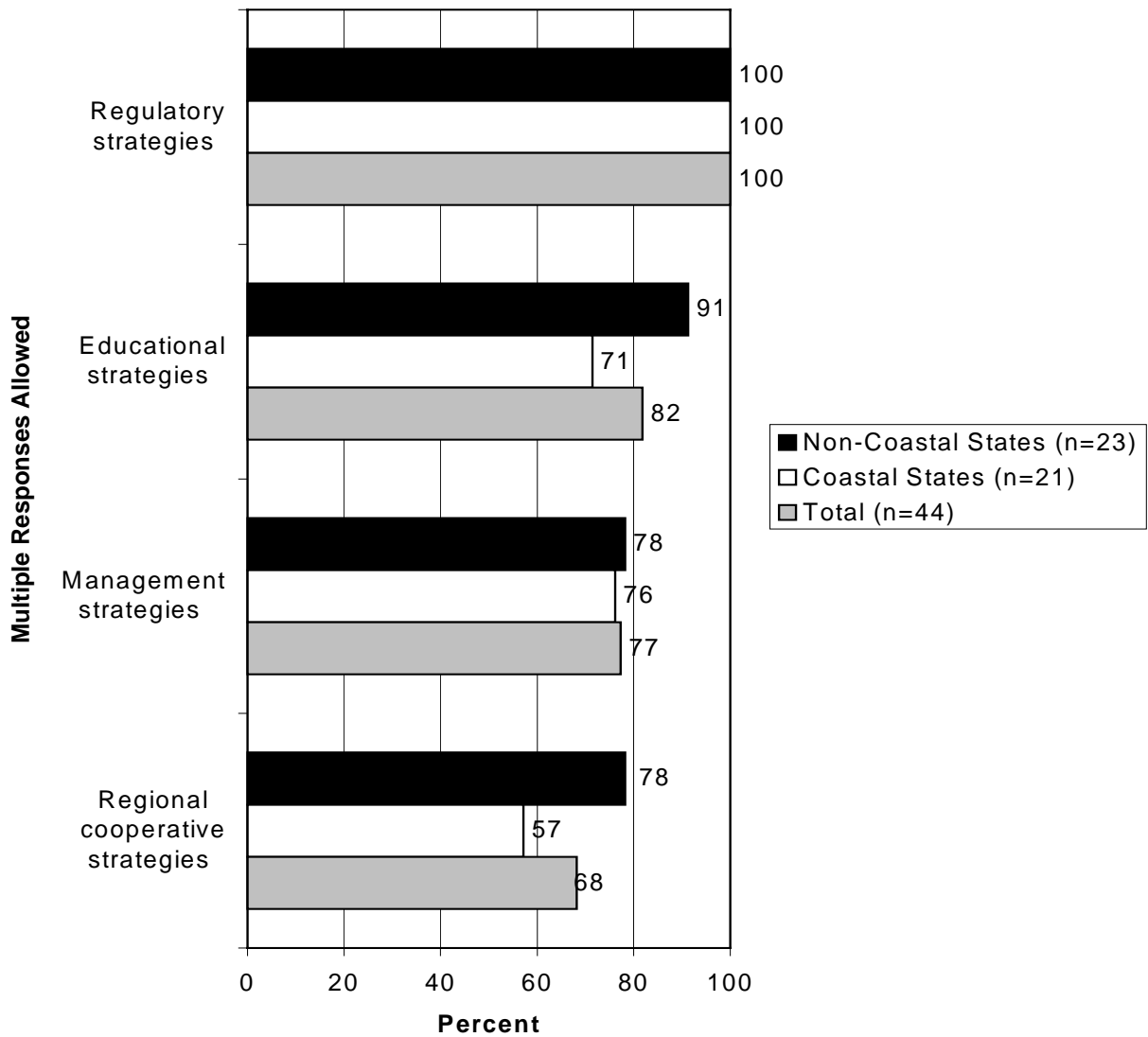
The majority of respondents (58%) indicated that their state uses a “limited approach” in addressing aquatic invasive species, although many respondents (42%) indicated that their state uses a “comprehensive approach.” No respondents said that their state uses “no approach.” There were strong differences between coastal and non-coastal respondents for this question: 55% of non-coastal respondents but only 29% of coastal respondents indicated that their state uses a comprehensive approach.

Q11. Please check the approach that best describes your state's approach to addressing aquatic invasive species.



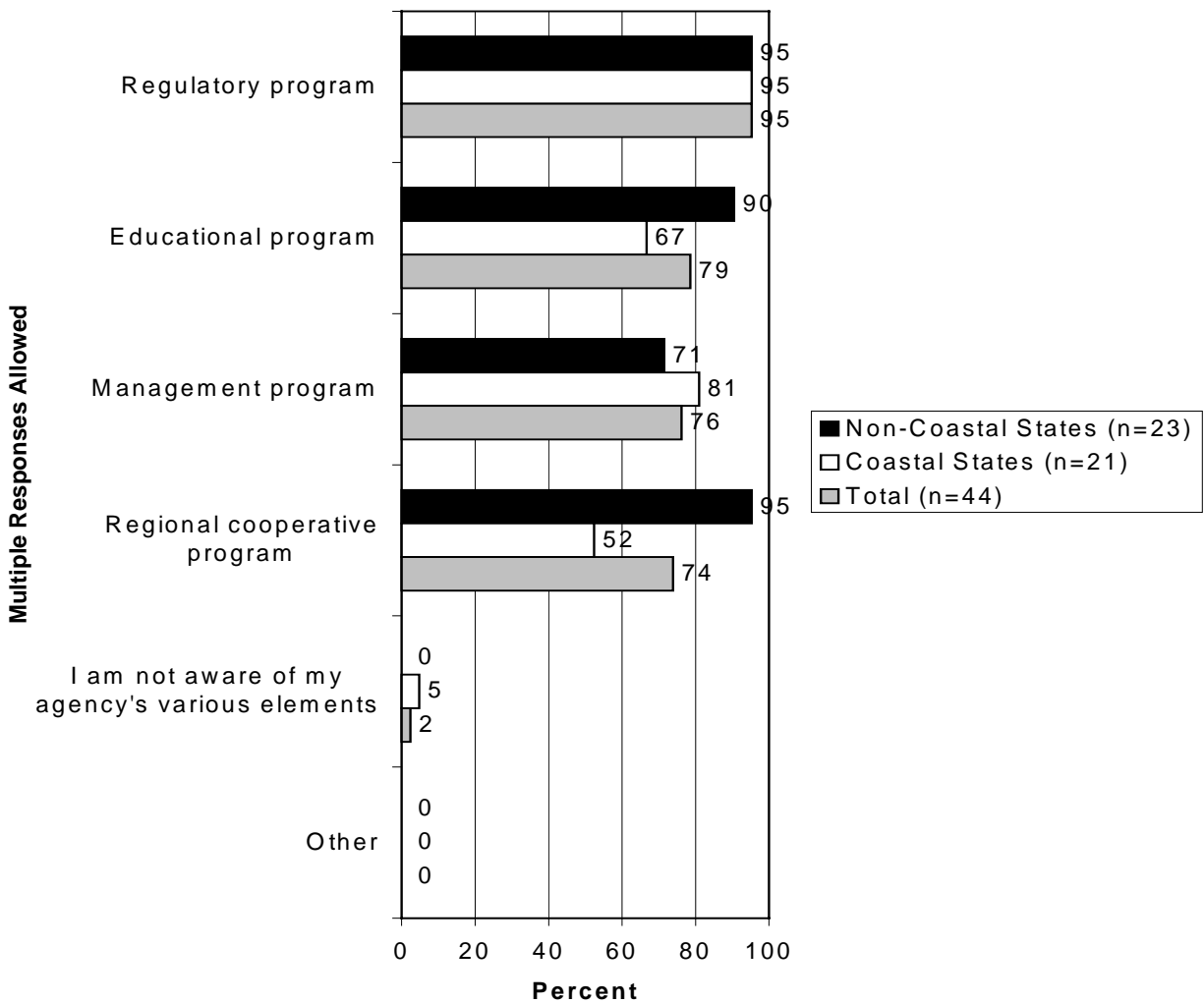
The most popular strategies to address aquatic invasive species are “regulatory strategies” (all respondents gave this answer) and “educational strategies.” Also important are “management strategies” and “regional cooperative strategies.”

Q7. If yes to Q4, what specific strategies does your agency use to address this issue? Does your agency have...?



In general, states used a mix of programmatic elements to address aquatic invasive species. The most popular elements (multiple responses allowed) are regulatory programs (95%), educational programs (79%), management programs (76%), and regional cooperative programs (74%). Slight differences exist in responses from non-coastal and coastal states. In particular, non-coastal states (95%) are much more likely to participate in a regional cooperative program than are coastal states (52%).

Q 12. If your agency utilizes a Comprehensive or Limited Approach, please indicate which programmatic elements your state employs in addressing aquatic invasive species.



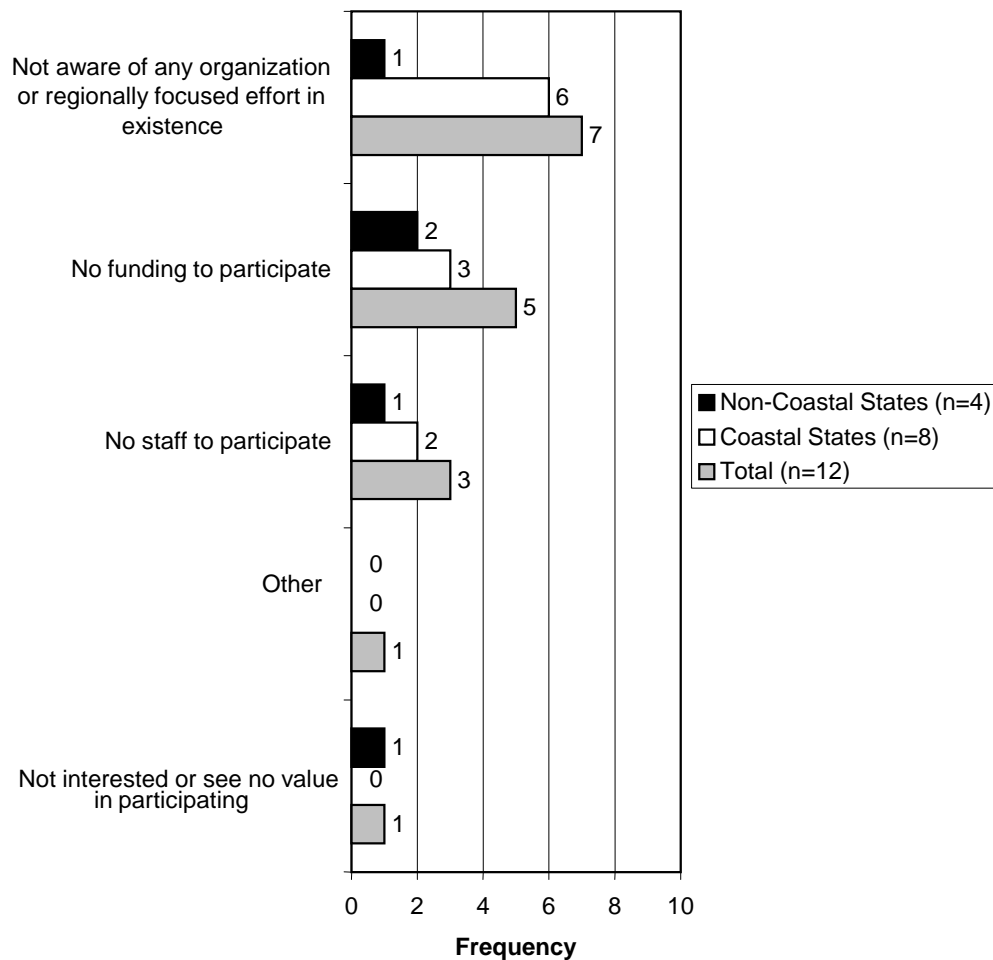
The following shows responses regarding regional cooperative programs in which states participate.

Regional Cooperative Programs

Missouri River Aquatic Invasion Work Group
100th Meridian Initiative
100th Meridian Initiative, Western Regional Panel of Aquatic Nuisance Species Task Force, State Zebra Mussel
Although not limited to aquatics, we participate in the Southeastern Exotic Pest Plant Council and MICRA
Aquatic Nuisance Species - Northeast Panel
Aquatic Nuisance Species Task Force and Florida Invasive Species Working Group
Chesapeake Bay Program - Invasive Species Work Group, MD Invasive Species Committee
Chesapeake Bay Program
Great Lakes Aquatic Nuisance Species Panel
Great Lakes Aquatic Nuisance Species Panel, North East ANS Panel
Great Lakes Panel on Aquatic Nuisance Species, Council of Great Lakes, Governors Ballast Water Task Force
Great Lakes Panel on Aquatic Nuisance Species
Great Lakes Panel on Aquatic Nuisance Species, Mississippi Interstate Cooperative Resource Association
Mississippi Interstate Cooperative Resource Association
Mississippi Interstate Cooperative Resource Association and USFWS
Mississippi Interstate Cooperative Resource Association
Mississippi River Basin Nuisance Aquatic Species Panel within Mississippi Interstate Cooperative Resource Association
Northwest Regional Aquatic Species Panel
Ohio River Fish Management Team, Mississippi Interstate Cooperative Resource Association
Pacific States Marine Fisheries Commission
The 100th Meridian Initiative
USFWS, New England Invasive Plant Group
Various organizations
Various task forces
Western Regional Panel - however we also deal with Pacific States Marine Fisheries, and other agencies in other states
Western Regional Panel
Western Regional Panel
Western Regional Panel of the Aquatic Nuisance Species Task Force, 100th Meridian Initiative
Western Regional Panel of the Aquatic Nuisance Species Task Force
Western Regional Panel of the Aquatic Nuisance Species Task Force
Western Regional Panel of the Aquatic Nuisance Species Task Force

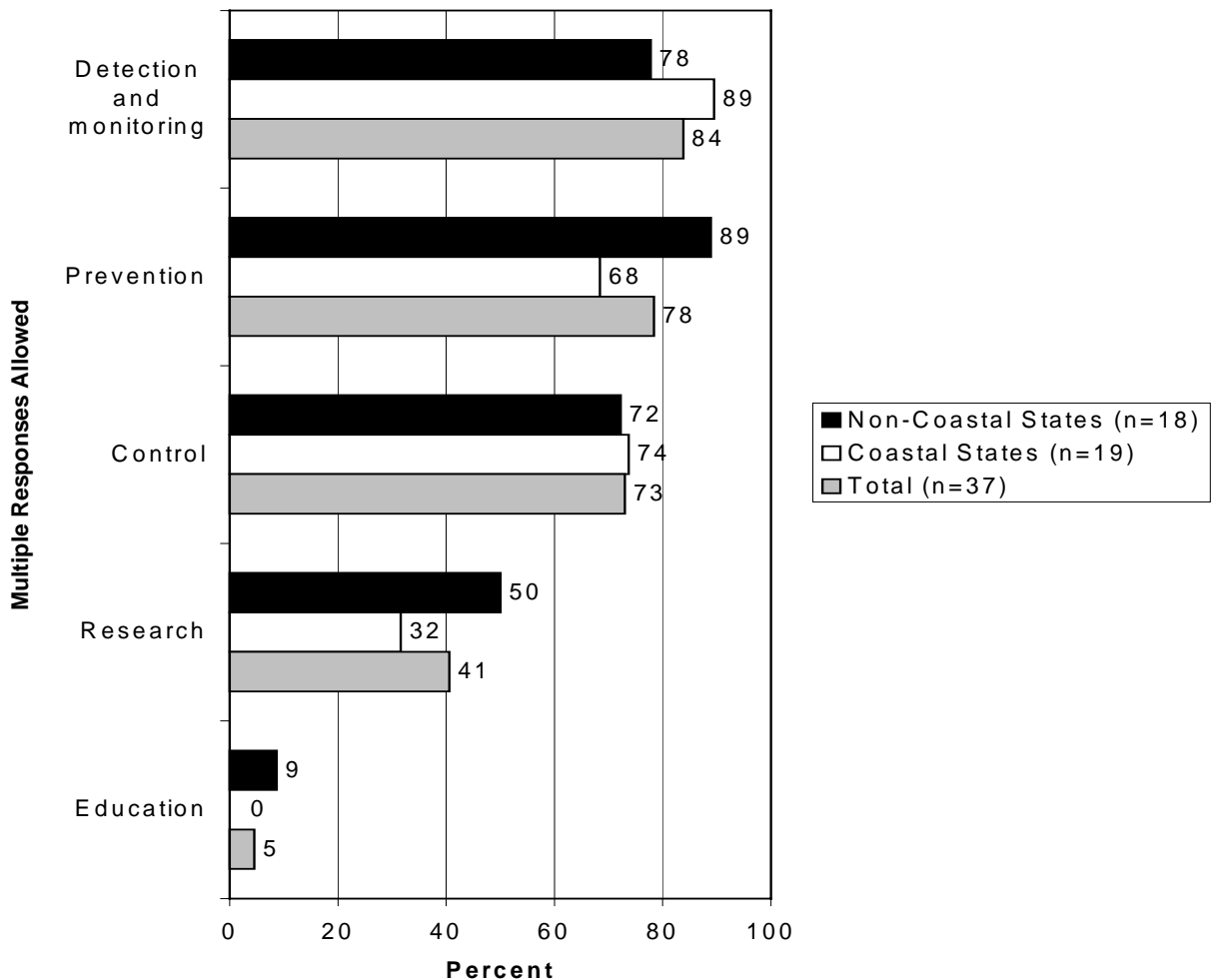
A few respondents said that they did *not* indicate that their agency uses a regional cooperative program because no organization or regionally focused effort was known to exist (7 respondents gave this answer—1 out of 4 non-coastal respondents and 6 out of 8 coastal respondents) or because no funding (5 respondents—2 out of 4 non-coastal respondents and 3 out of 8 coastal respondents) or no staff (3 respondents—1 non-coastal and 2 coastal) was available for participating.

Q14. If you did not check the Regional Cooperative Program choice in Q12, what are the reasons that your agency does not participate in this program?



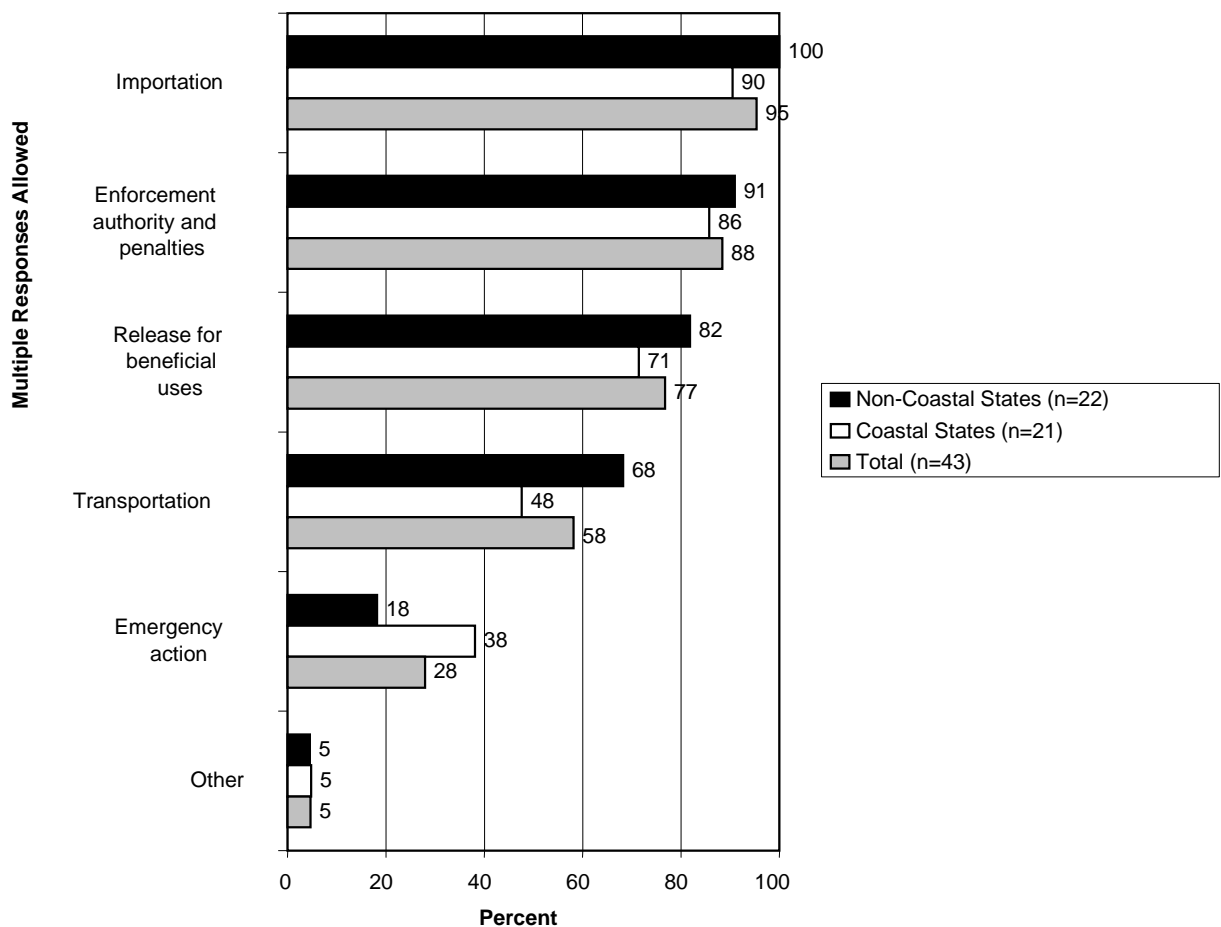
Majorities of respondents indicated that “detection and monitoring” (86%), “prevention” (84%) and “control” (78%) are elements of their management program to address aquatic invasive species. Although not a majority, a sizable percentage (43%) said that “research” is an element of their management program. A slightly higher percentage of coastal than non-coastal states use “detection and monitoring” as an element of their management program, and a slightly higher percentage of non-coastal than coastal states use “prevention” as an element of their management program.

Q 15. If your agency has a Management Program, which of the following elements are part of your agency's Management Program ?



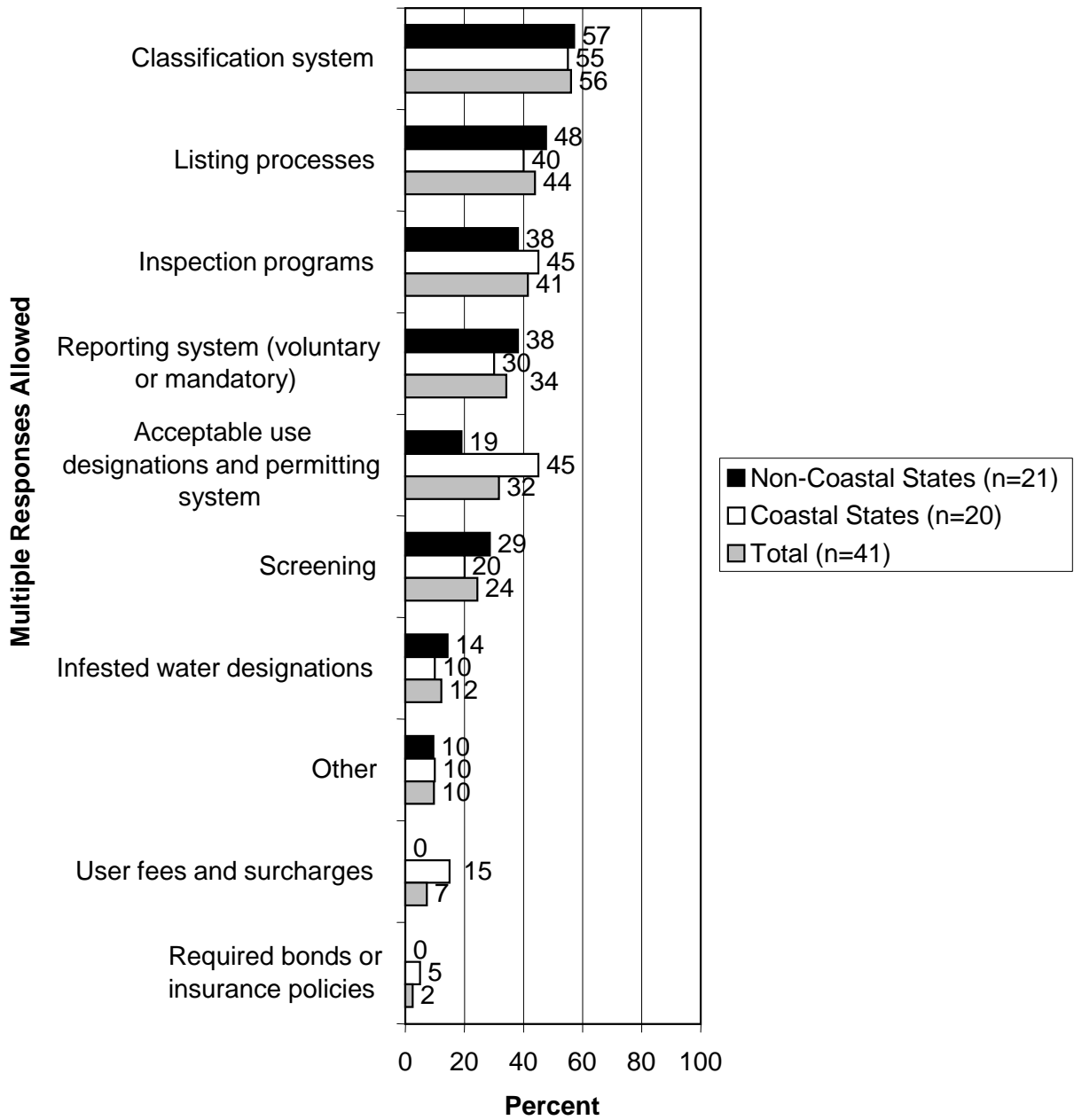
Strong majorities of respondents indicated that “importation” (95%), “enforcement authority and penalties” (88%), and “release for beneficial purposes” (77%) were areas in which their agency had regulatory powers regarding aquatic invasive species. A slight majority (58%) said that “transportation” of aquatic species was a regulatory power of their agency. There are no large differences between coastal and non-coastal respondents, with the exception of the area of transportation: 68% of non-coastal state respondents, but only 48% of coastal state respondents, indicated that “transportation” was an area under their state agency’s jurisdiction.

Q16. If your agency has a Regulatory Program, which of the following areas fall under your agency's regulatory powers?



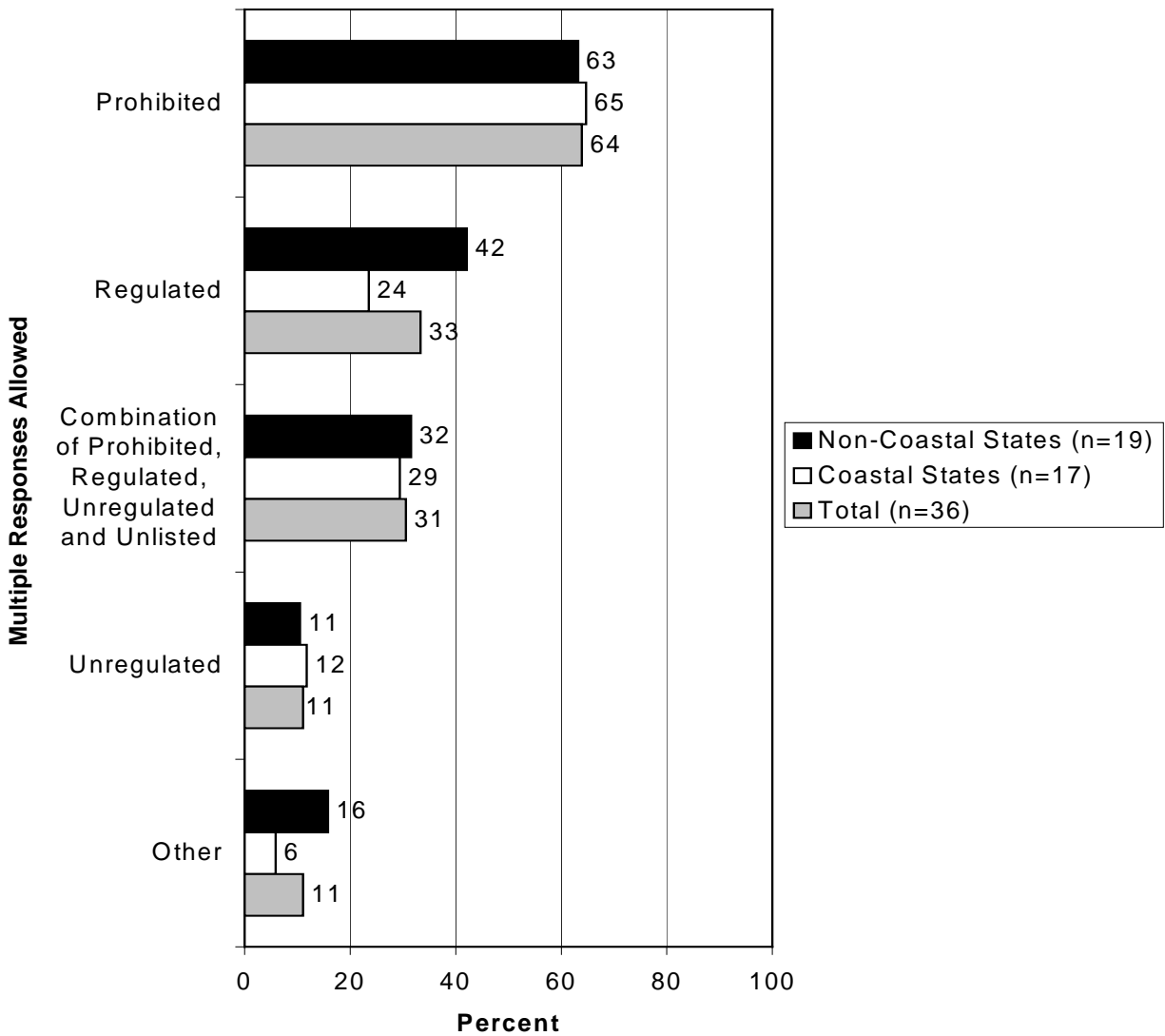
A majority of respondents (56%) said that their agency uses a classification system as part of its regulatory program for aquatic invasive species. Other mechanisms are used (shown in the graph) by less than a majority of agencies. The largest difference between coastal and non-coastal states is in the use of the regulatory mechanism, “acceptable use designations and permitting system”: while 45% of coastal states use this mechanism, only 19% of non-coastal states use this mechanism. This graph appears on the following page.

Q21. If your agency has a Regulatory Program for aquatic invasive species, which of the following regulatory mechanisms are used?



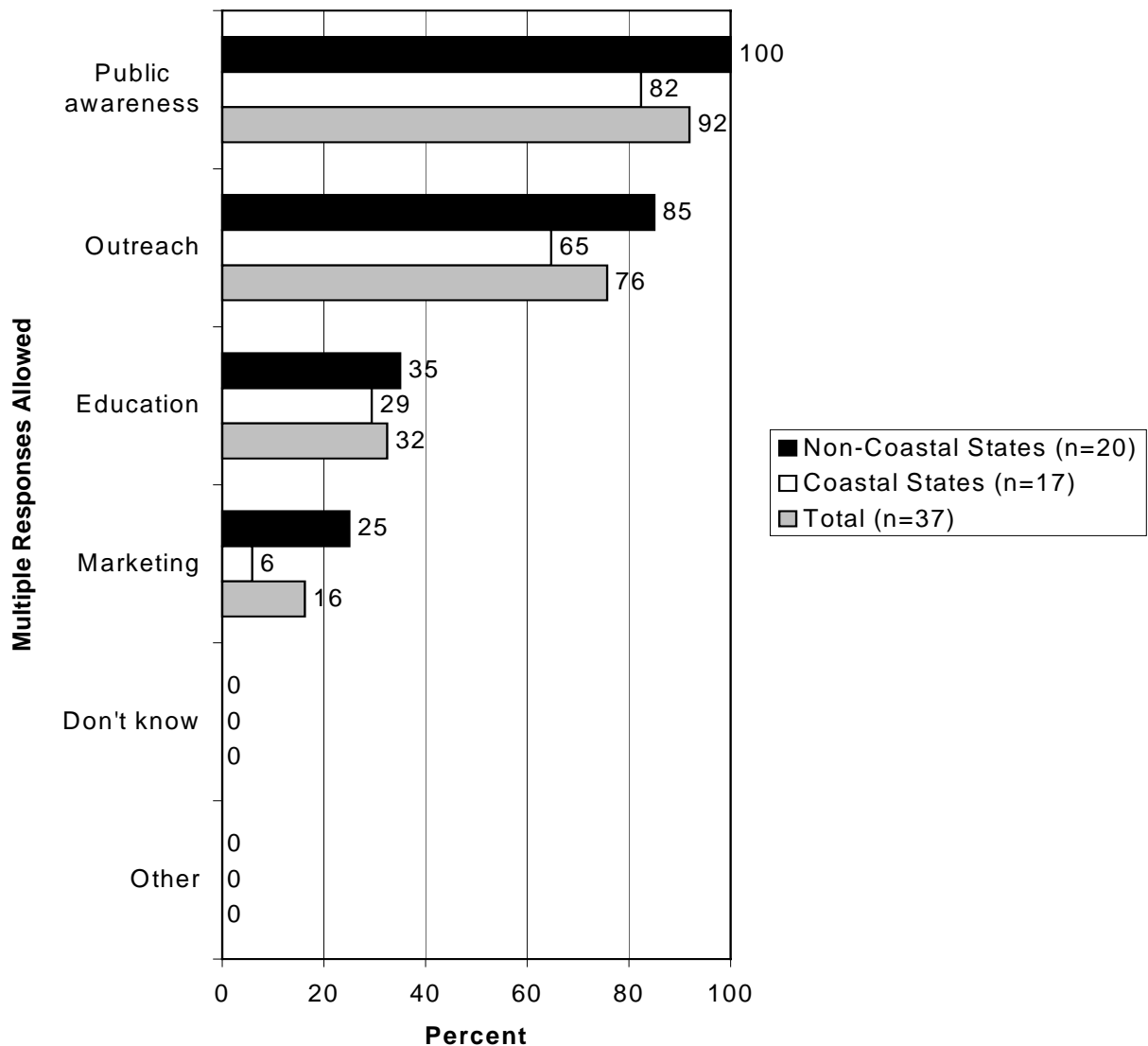
The classification system categories used by various agencies as part of their regulatory programs to address aquatic invasive species include “prohibited” species (64% of respondents said their agency uses this classification category), “regulated” species (33%), and a “combination of prohibited, regulated, unregulated, and unlisted” (31%).

Q22. If your agency uses a Classification System, please indicate the categories your agency uses in aquatic invasive species classification.



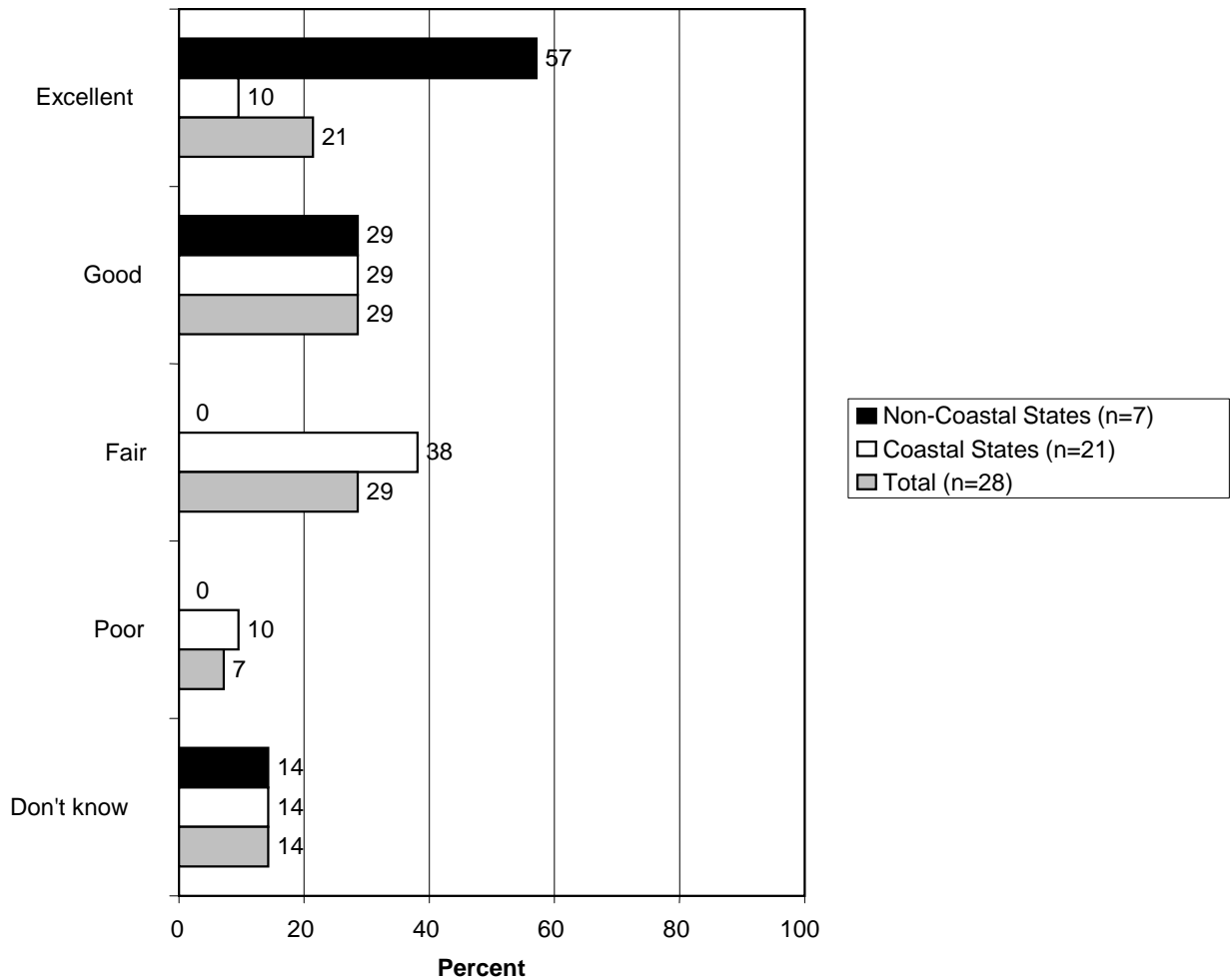
The elements that respondents most frequently said best describe their agency's educational program for addressing aquatic invasive species are public awareness (92%) and outreach (76%), and a higher percentage of respondents from non-coastal states than from coastal states indicated that these elements are part of their state's educational program.

Q23. If your agency has an Educational Program addressing aquatic invasive species, which of the following elements describe this program?



Several respondents from non-coastal states answered this question (most of those non-coastal states have large lakes, such as the Great Lakes or Lake Champlain). Exactly 50% of those respondents indicated that their agency has an excellent (21%) or good (29%) relationship with the state Sea Grant Program. Another 29% said their agency has a fair relationship with the Sea Grant Program, and only 7% said their agency has a poor relationship. A much higher percentage of respondents from non-coastal states answered “excellent” than did respondents from coastal states.

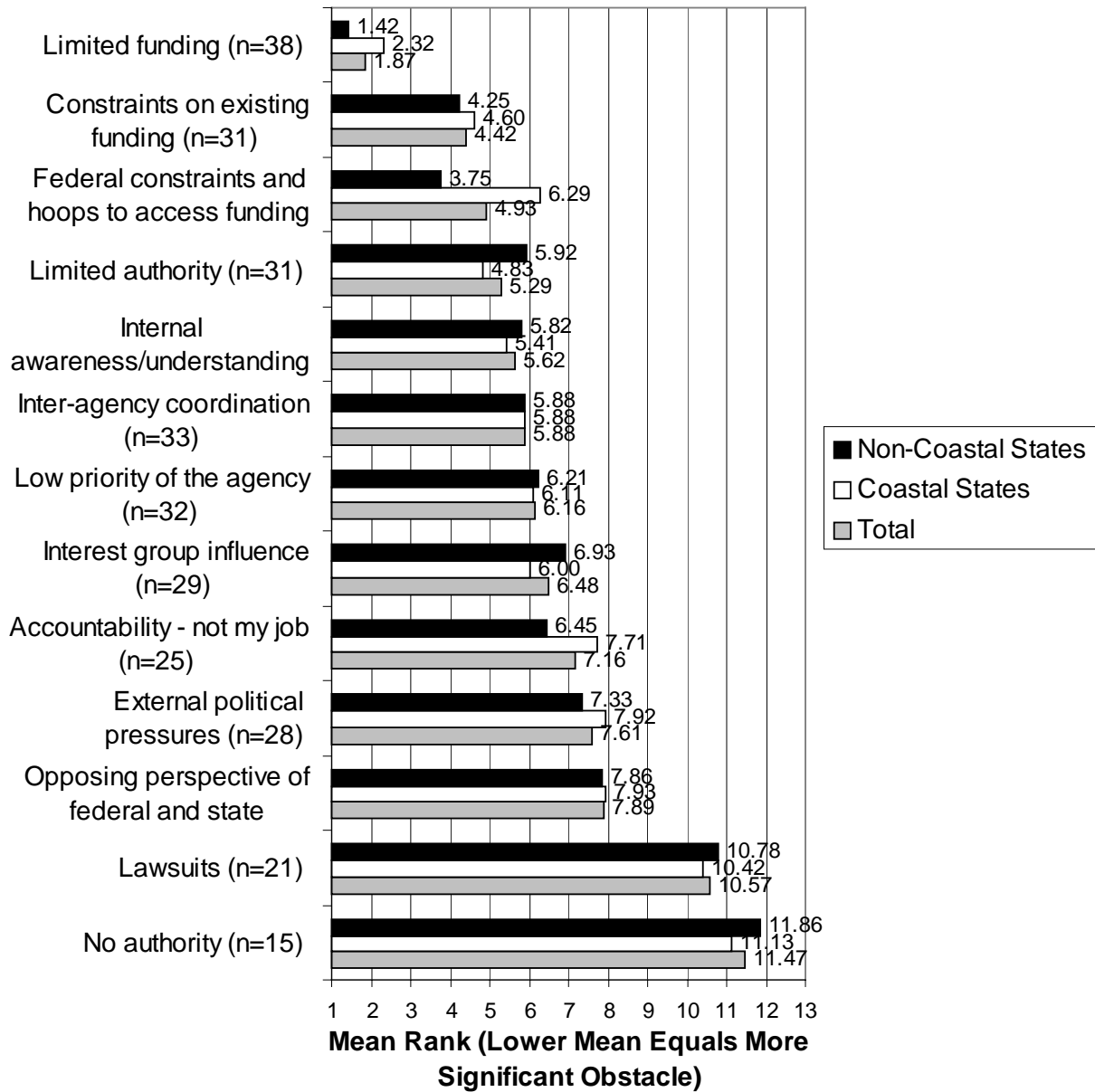
Q31. If your agency is in a coastal state, how would you describe your relationship with the state Sea Grant Program with respect to the aquatic invasive species issue?



CHALLENGES TO ADDRESS AQUATIC INVASIVE SPECIES

The obstacles that states face in addressing aquatic invasive species are shown in the graph that follows, with the most significant obstacles having a low number and the least significant obstacles having a high number. Limited funding was the most significant obstacle. A higher percentage of respondents from coastal states than from non-coastal states said that “federal constraints and hoops to access” was a significant obstacle. This graph appears on the following page.

Q38. Of the following items, what are the most significant obstacles your agency faces in addressing the aquatic invasive species issue? Please rank each of the following with 1 indicating the most significant obstacle and 13 indicating the least significant obstacle. Write "NA" if the item does not apply to your agency.



The tabulation below shows respondents' suggestions for improving the USFWS's efforts regarding aquatic invasive species and the Lacey Act.

Q33. Understanding the limitations of the Lacey Act, how can the USFWS improve its efforts to meet these legal responsibilities while working to assist the states with their challenges to address the aquatic invasive species problem?

Suggested Improvements to the USFWS's Efforts Regarding Aquatic Invasive Species and the Lacey Act

1)Lobby for increased funding; 2)Partner with state agencies that have more enforcement personnel and material resources.
A "white list"-why not have a list of species that can be transferal important?
A regional approach would be more manageable and effective.
Additional resources are needed to expand efforts to regulate importation.
Better communication with state agencies with regard to USFWS activities.
Better coordination and funding.
Conduct investigations and enforce Act. Detect and prevent introduction of ANS. Penalties need to be imposed on violators.
Do not know. I need better understanding of Lacey Act relative to aquatic species.
Don't know.
Don't know, not familiar with Act.
FWS coordinate with states regarding AIS; have a stronger enforcement presence and help deter importation/transportation.
I don't have sufficient off-hand knowledge to address this question.
I have only a vague idea about the Lacey Act and the USFWS roles relative to this Act and ANS species.
Improve communication of USFWS's responsibility; explain Lacey Act's limitations. USFWS should regulate aquatic invasive species internationally.
Invite State representative to periodic training sessions to discuss new developments in Aquatic Nuisance Species prevention.
Need mechanism to give federal assistance to states affected by actions of other states.
NISA has been primary venue for USFWS support of MI efforts. Funding is too low. NISA=National Invasive Species Act
Not sure.
Not sure.
Philosophical difference between federal and state agencies on invasive species. Because of this, USFWS needs to take flexible approach.
Provide information/coordination/education on Act.
Provide more oversight to interstate transport of ANS and develop a greater enforcement effort.
States have responsibility to screen introductions at point of sale. USFWS should ensure state screening programs are consistent.

Suggested Improvements to the USFWS’s Efforts Regarding Aquatic Invasive Species and the Lacey Act (continued)

Talk to ADF&G about this issue and work cooperatively to establish long-term program. Fish stocking should be considered.
Tech support and standards for each state when reviewing species. Assist with education programs.
The short answer is providing better guidance on these issues.
Update list of Federally listed ANS species, include black carp, and better regulate interstate transportation of listed species.
Use of Lacey Act has been unnecessarily limited. Need validation of authorities under Lacey Act.
USFWS doing better job working with regional organizations and nuisance species. USFWS has work recognizing state authority.
USFWS never contacted our agency regarding a Lacey Act listing that began with an action by Mississippi catfish farmers.
USFWS should take more active oversight role in regulating the transportation of potentially invasive aquatic species.
Work more closely with the states as facilitator to develop win-win solutions across state and regional boundaries.
Work with states to identify gaps, jointly pursue regulations/legislation. Provide funding for outreach, education, and development of ANS program.

BUDGET/FUNDING TO ADDRESS AQUATIC INVASIVE SPECIES

The following table shows the budget allocation for each state for its aquatic invasive species program. The mean budget allocation for management programs and regulatory programs is higher among coastal states than among non-coastal states. The mean budget allocation for education programs is higher among non-coastal states than among coastal states. Following the tabulation is a graph showing mean budget allocations.

Q34. What are the approximate annual budgetary allocations for the various state-level programs that you know about? If a program is not applicable to your agency, write “NA” next to the appropriate program.

Budgetary Allocations for State-Level Programs for Addressing Aquatic Invasive Species

State	Management Program \$	Regulatory Program \$	Education Programs \$	Total \$
Alabama	NA			
Alaska	10,000	10,000		20,000
Arizona	0	0	0	0
California	100,000	NA	NA	100,000
Colorado	20,000	5,000	10,000	35,000
Connecticut	NA	NA	NA	NA
Florida	150,000	650,000		800,000
Georgia			5,000	5,000
Idaho	0	0	0	0
Illinois	27,000	40,000	10,000	77,000
Indiana	24,473	11,220		35,693
Louisiana	45,000			45,000
Maine		500,000	50,000	550,000
Michigan	100,000	200,000	25,000	325,000
Minnesota	500,000	150,000	450,000	1,100,000
Missouri	70,000	NA	1,000	71,000
Montana	25,000	3,000	5,000	33,000
Nevada	500	0	NA	500
New Hampshire	0	0	2,000	2,000
New Jersey	0	0		0
New York	250,000	NA	NA	250,000
North Dakota	10,000		25,000	35,000
Oklahoma	10,000	10,000	5,000	25,000
South Carolina	230,000	10,000	500	240,500

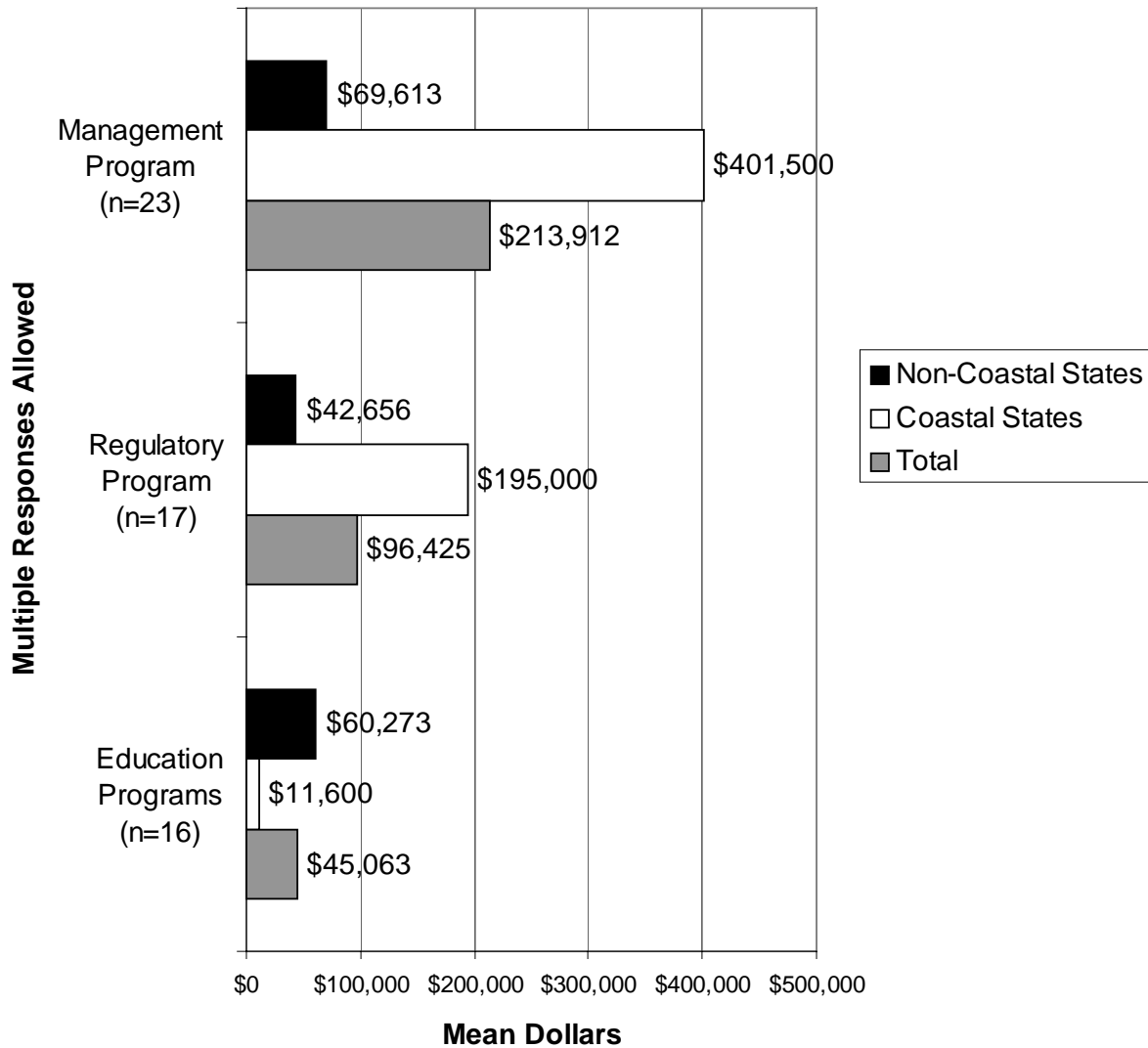
Does not show states that did not respond.

**Budgetary Allocations for State-Level Programs for Addressing Aquatic Invasive Species
(continued)**

State	Management Program \$	Regulatory Program \$	Education Programs \$	Total \$
Texas	NA	NA	NA	NA
Washington	3,000,000			3,000,000
West Virginia	NA	NA	NA	NA
Wisconsin	118,000	50,000	132,000	300,000
Wyoming	NA	NA	NA	NA

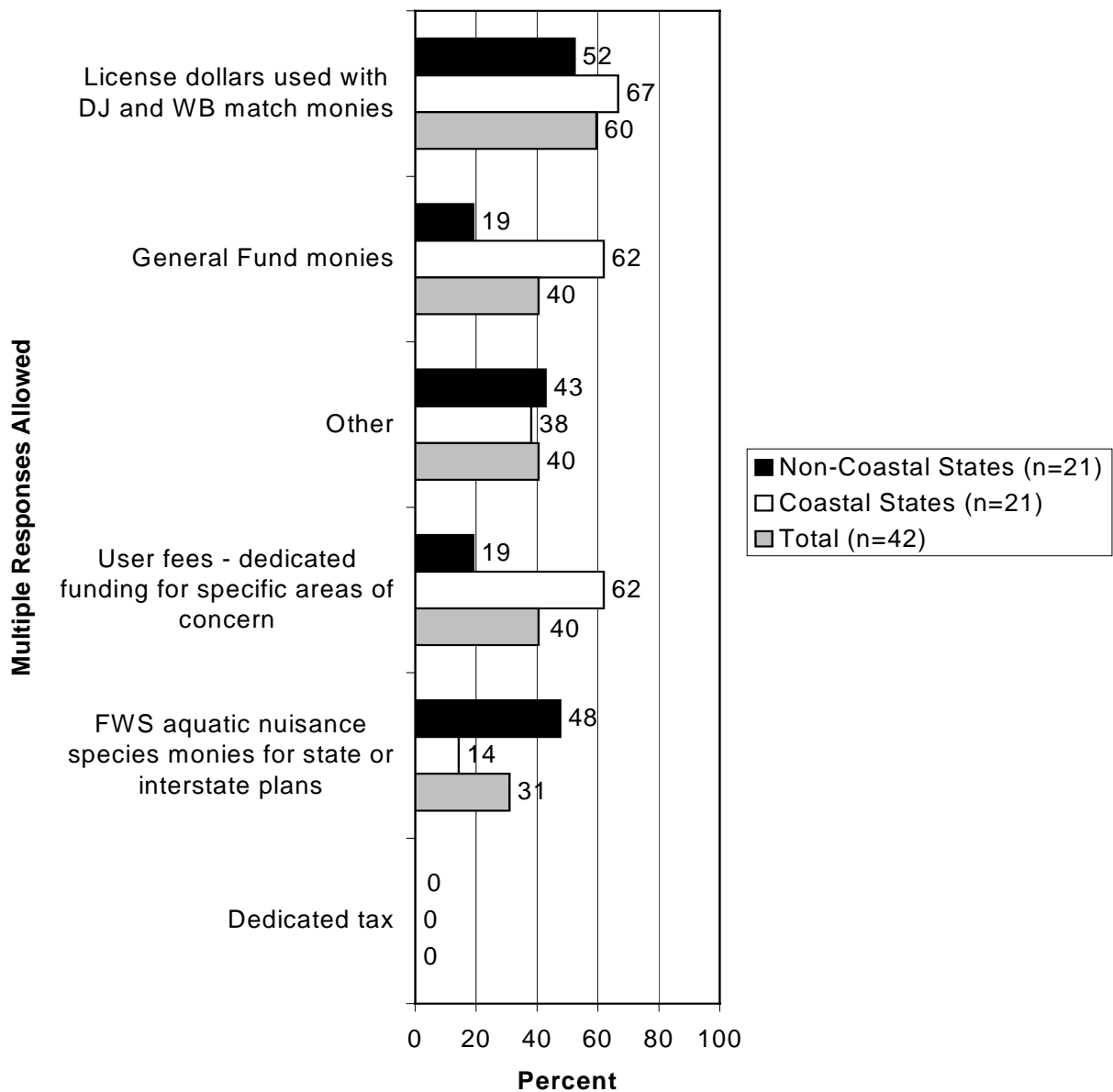
Does not show states that did not respond.

Q34. What are the approximate annual budgetary allocations for the various state-level programs that you know about? Please give a dollar amount for each program or write in a "?" if you do not know. If a program is not applicable to your agency, write "NA" next to the appropriate program.



The following graph and the tabulation on the next page show the sources of funding for addressing aquatic invasive species. “General Fund monies” and “user fees” were used more often by coastal states than by non-coastal states.

Q35. What sources of funding does your agency use to support its efforts to address the aquatic nuisance/invasive species issue?



Other Sources of Funding for Addressing Aquatic Invasive Species

100th Meridian Funds
70000
Conservation Fund
Corps of Engineers' Aquatic Plant Control Program funds; local sponsor cost-share funds
Federal EPA
Fishing and Hunting License money
General funds/WB/user fees
Interjurisdictional Fisheries Act
Lottery funds
Missouri 1/8% sales tax
Nongame wildlife vehicle tag provides monies for staff support in Nongame Wildlife & Natural Heritage Section
Preservation Fund
Surcharge on watercraft licenses
Various outside sources
Water Conservation Fund from motorboat gas tax
Waterway improvement
WCRP grant monies and assistance from Western Regional Panel

For those agencies that use license dollars/Federal Aid to address aquatic invasive species, the following tabulation shows how much of this funding is spent annually in the state.

Q36. If your agency uses license dollars/Federal Aid on the aquatic invasive species issue, how much of this funding is spent annually in your state?

Amount of License Dollars/Federal Aid Funding Spent Annually in State

State	Amount of license dollars/Federal Aid funding spent annually in state
Alaska	\$10,000
Idaho	\$0
Illinois	\$0
Indiana	\$26,769
Louisiana	\$2,500,000
Michigan	\$108,000
Mississippi	\$0
Montana	\$3,500,000
Nebraska	\$16,900
New Hampshire	\$2,000
New Jersey	\$0
New York	\$275,000
North Dakota	\$10,000
Oklahoma	\$25,000
South Carolina	\$10,000
Vermont	\$60,000
Washington	\$100,000

Does not show states that do not use license dollars/Federal Aid.

The tabulation below shows the number of full-time staff positions that each agency dedicates to aquatic invasive species programs. Coastal states tended to have more employees for management and regulatory programs and fewer employees for education programs than did non-coastal states.

Q37. Approximately how many full-time staff positions does your agency dedicate to the aquatic invasive species problem?

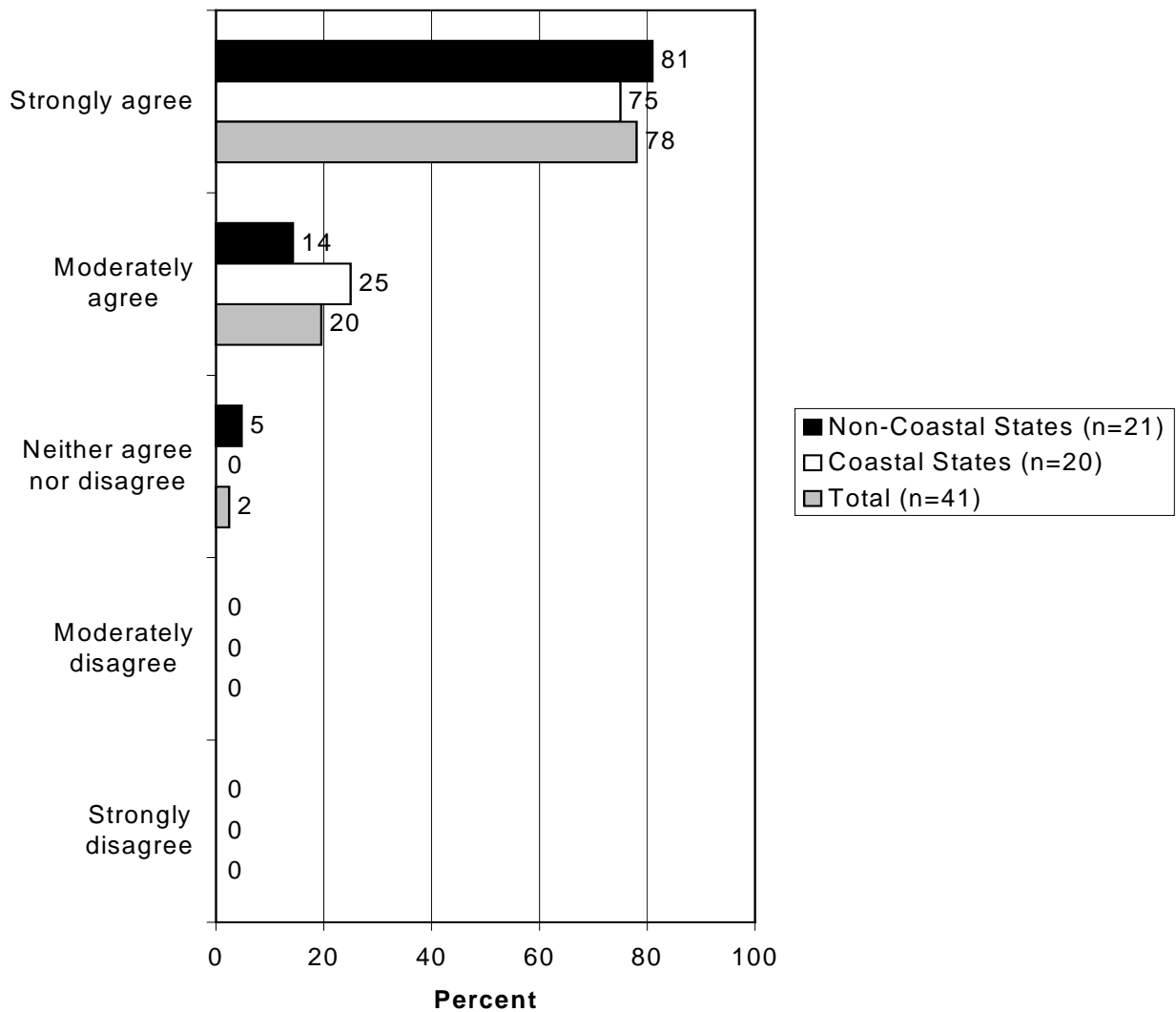
Number of Full-Time Staff Positions Dedicated to Aquatic Invasive Species Programs

State	Management Programs	Regulatory Programs	Education Programs
California	1		
Colorado	1	1	1
Connecticut	1	1	1
Florida	3	13	
Illinois	1	1	1
Indiana	1	1	
Louisiana	1		
Maine		6	2
Maryland	3	1	1
Michigan	1	2	1
Minnesota	3	2	11
Montana	1	1	1
Nevada		1	
New York	3	1	
North Carolina	1	1	1
North Dakota	1	1	1
South Carolina	2	1	1
South Dakota			1
Texas	4	1	
Vermont	1	5	5
Washington	5	2	1
Wisconsin	2	1	2

Does not include those states for which respondents did not answer, gave an answer of 0, or gave an answer that was a fraction.

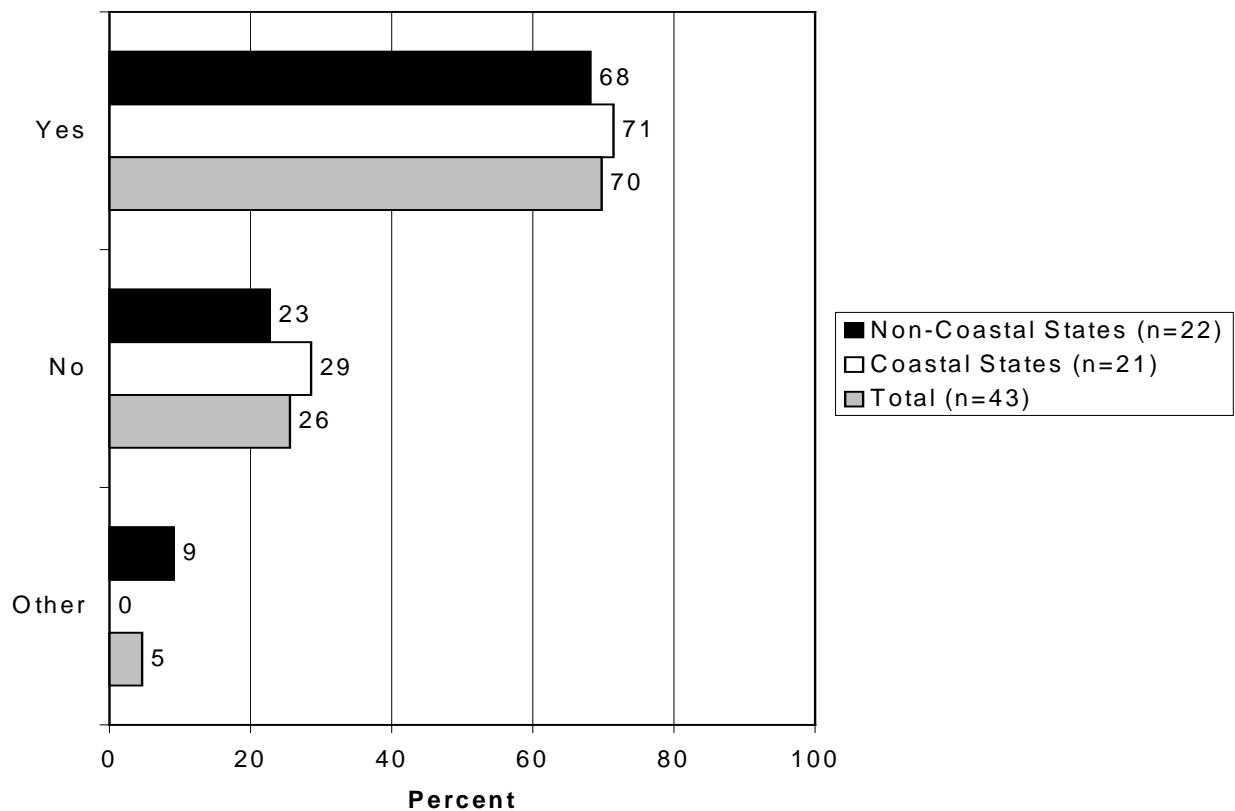
Support for the National Invasive Species Act was very high: 98% of respondents agreed (78% strongly agreed) that the IAFWA should try to increase funding for the Act when it is up for reauthorization this year.

Q39. This year, the National Invasive Species Act is up for reauthorization by Congress. A provision in this law addresses state involvement. Do you agree or disagree that the IAFWA should try to increase this funding?

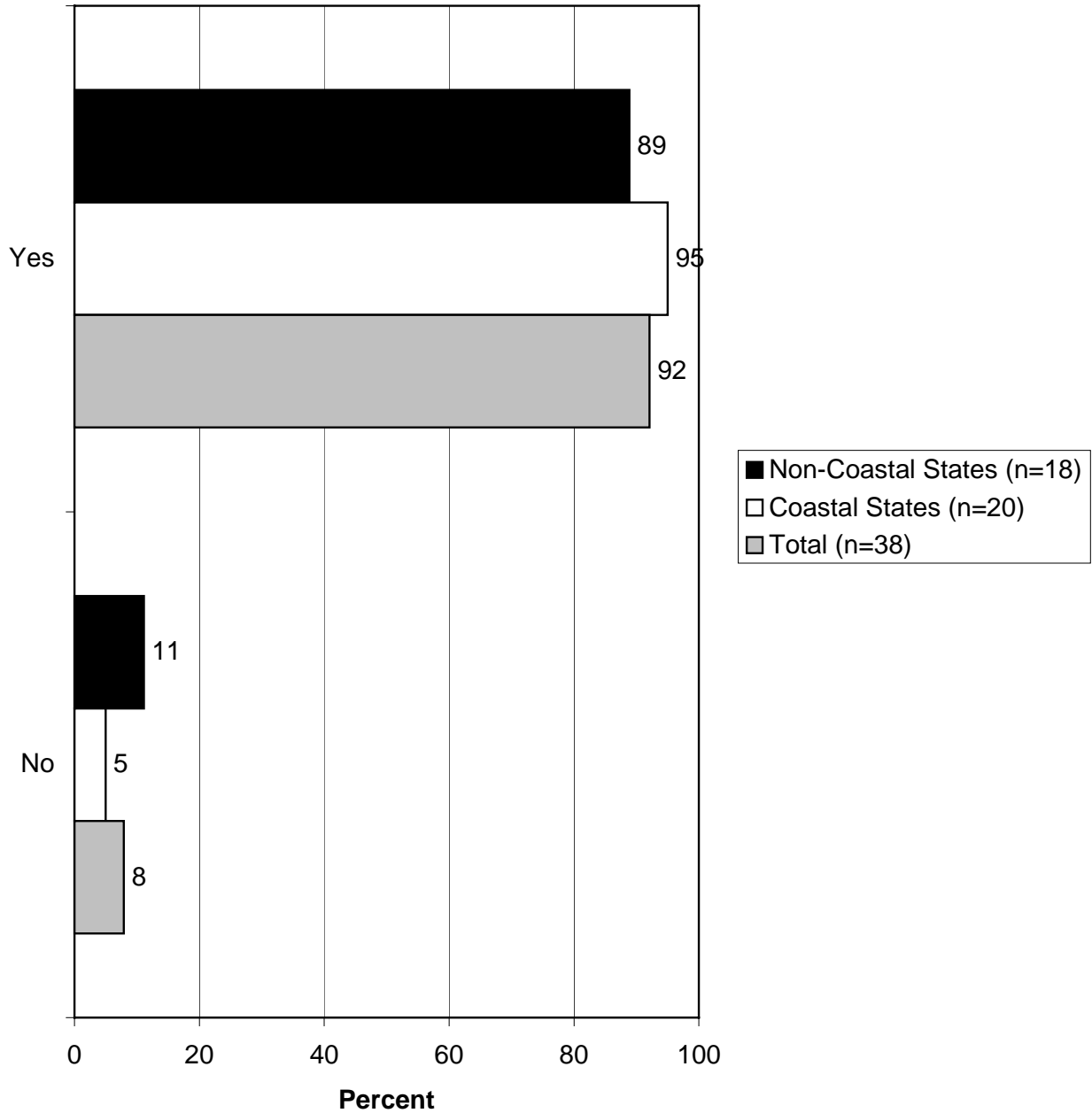


Most respondents also indicated that their agency does not have the resources to develop an aquatic invasive species management plan without a guarantee of funding (i.e., there is limited funding for the *development* of the plan). However, if the rules were changed to provide for funding for the development of an aquatic invasive species management plan, respondents overwhelmingly said that their agency would develop a program to address aquatic invasive species. Coastal and non-coastal states are not greatly different on this issue.

Q40. The current law requires states to develop and submit a state aquatic nuisance species management and implementation plan to the USFWS for consideration of grant funding. Some states have indicated that they do not have the staffing and/or financial resources to pull so develop a plan without a guarantee of funding. Does this accurately describe your agency's situation?

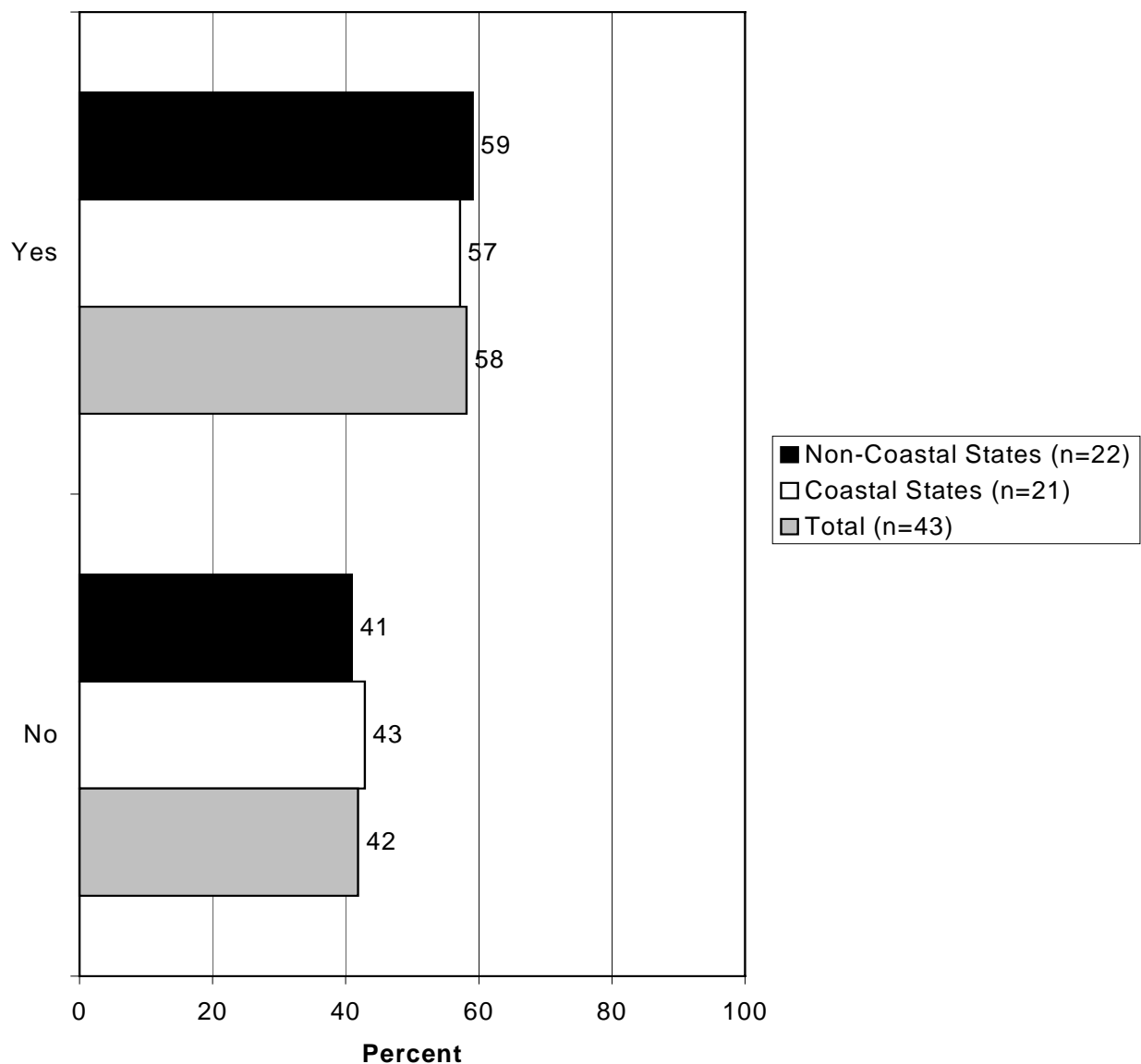


Q41. If these restrictions were changed to provide funding to states for planning and implementation, would your agency pursue the development of a program to address aquatic invasive species?



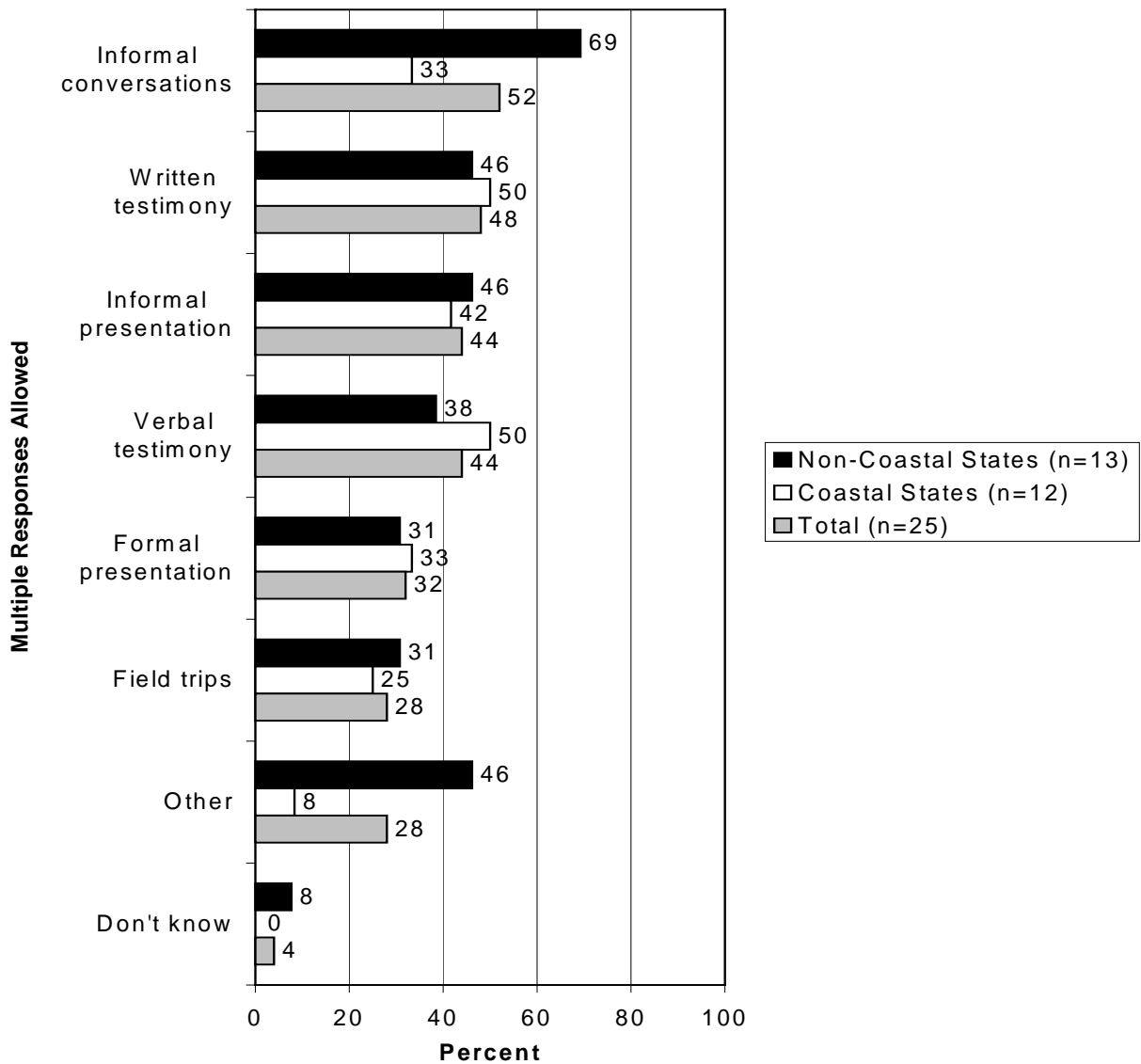
Currently, slightly more than half (58%) of respondents indicated that their agency has presented the problem of aquatic invasive species to their state legislature and/or governor. Coastal and non-coastal states are almost exactly identical in their responses to this question.

Q42. Has your agency presented the aquatic invasive species problem to your state legislature or governor?



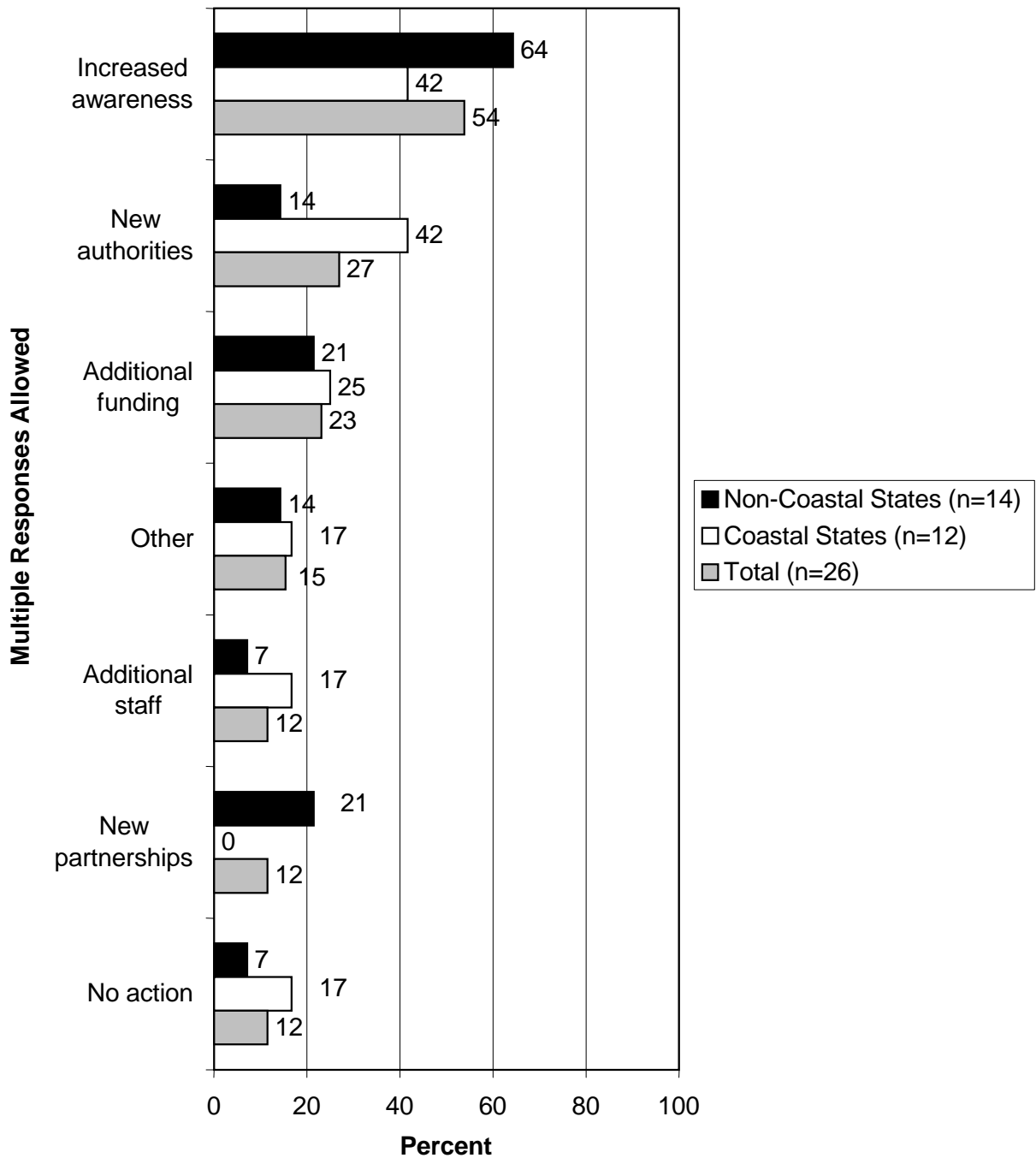
The most common ways that their agency presented the information to the legislature and/or governor was through informal conversations (52% having presented the information this way), written testimony (48%), informal presentation (44%), and/or verbal testimony (44%). There were some differences between coastal and non-coastal states. In particular, 69% of respondents from non-coastal states and only 33% from coastal states indicated that the information was presented through informal conversations.

Q43. If yes to Q42, how did your agency present this information?



The results of the presentation of information about aquatic invasive species to the legislature and/or governor most commonly included “increased awareness” (54%). However, concrete action was taken by some states: 27% of respondents said that the results of the presentation included new authority for addressing the issue, and 23% said the results included additional funding. Those agencies in coastal states were more likely to be granted new authorities as a result of the presentation of information: while 14% of agencies from non-coastal states were granted new authorities as a result of the presentation of information, 42% of agencies from coastal states were granted new authorities. This graph appears on the following page.

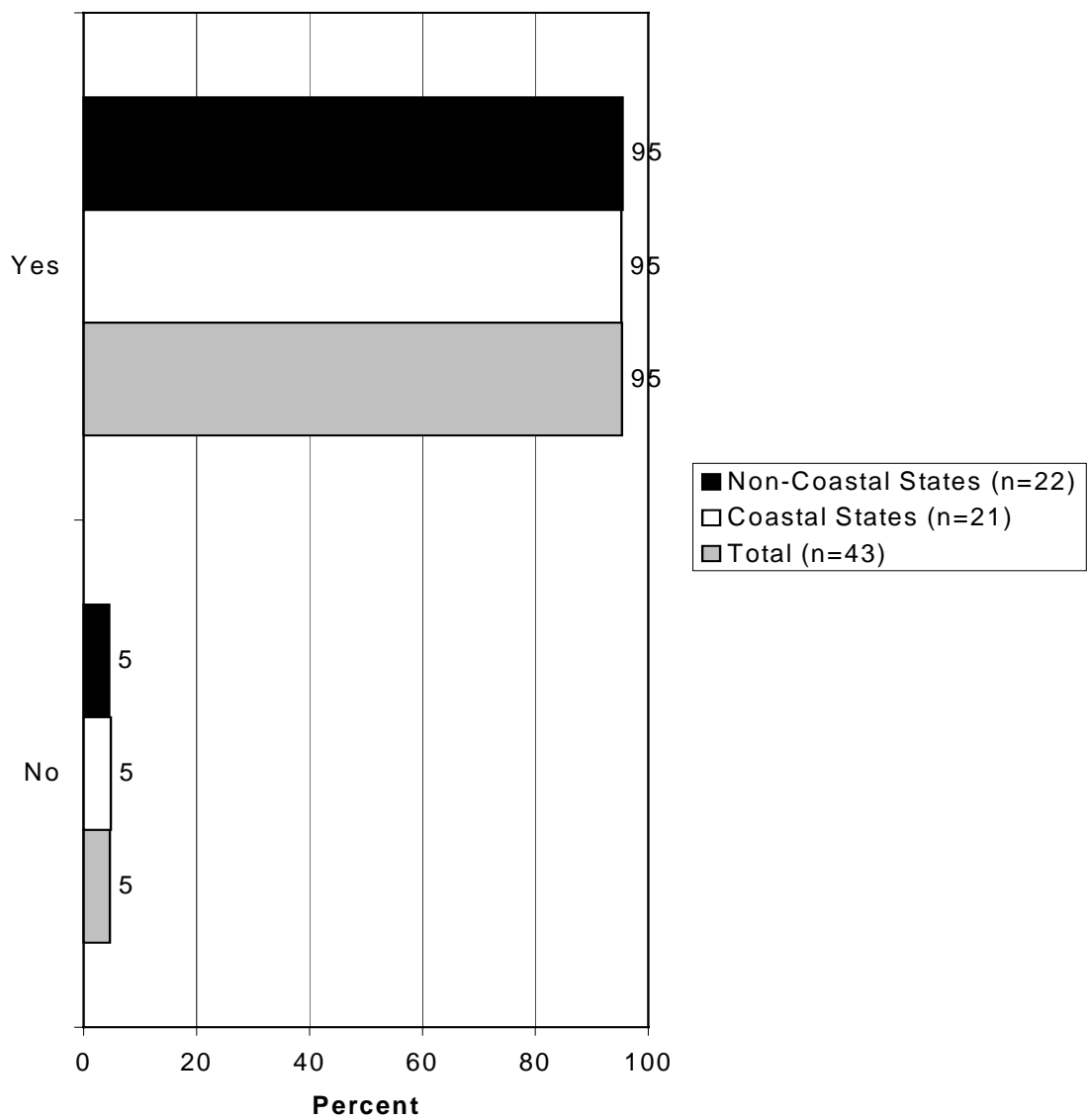
Q44. If yes to Q42, what were the results of this presentation?



AGENCY INTEREST IN A NATIONAL MARKETING INITIATIVE

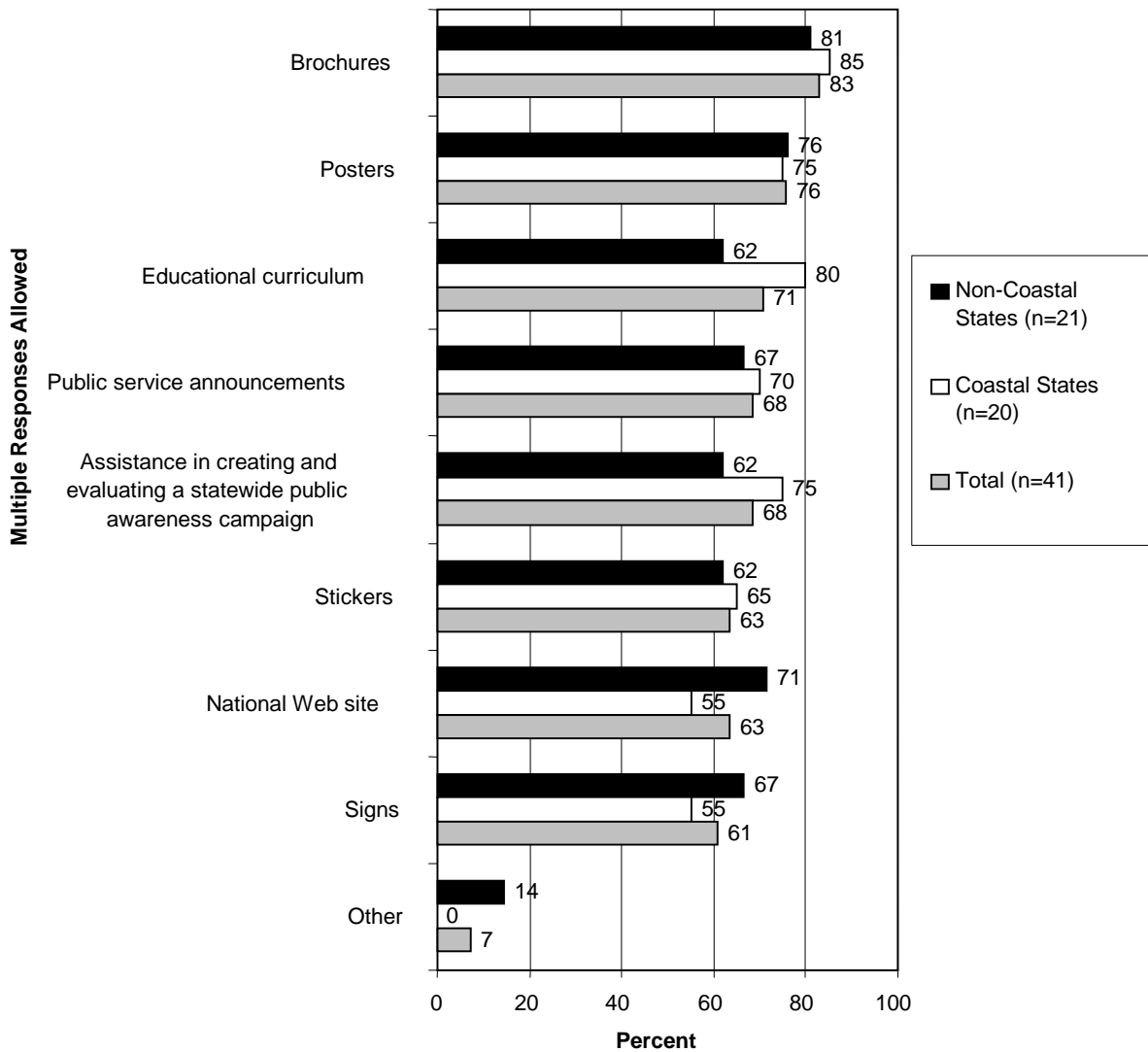
Interest in participating in a national marketing initiative to address aquatic invasive species was very high: 95% of respondents said their agency would be interested in participating in a national marketing initiative.

Q45. Would your agency be interested in participating in this national marketing initiative?



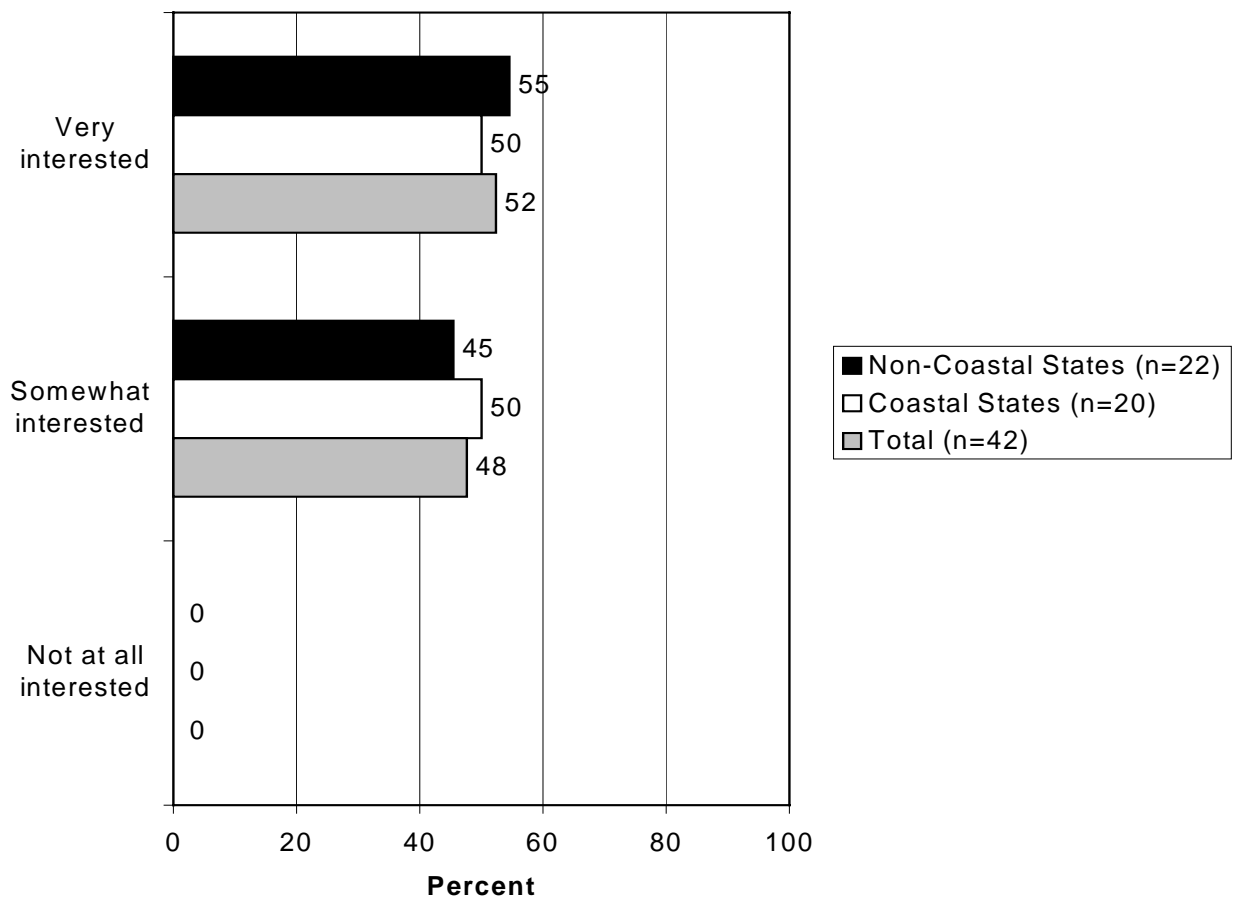
Respondents said that the most valuable tools as part of a national marketing initiative would be brochures (83%), posters (76%), educational curriculum (71%), public service announcements (68%), and assistance with a public awareness campaign (68%). There were slight differences between coastal and non-coastal states, particularly in those saying that educational curriculum, assistance with a public awareness campaign, a national Web site, and signs would be valuable tools.

Q46. If yes to Q45, which of these tools would be valuable to you?



All respondents expressed interest in using the information from this survey to inform their state's policy makers about the capabilities and needs of the state agencies that have the responsibility to address aquatic invasive species. There is no great difference between coastal and non-coastal states for this question.

Q48. State Level Policy Makers are the other primary target audience. This group was chosen because of their impact on state agencies' abilities to do their jobs. Would you say you are very interested, somewhat interested, or not at all interested in using the information from this survey to inform policy makers in your state about your agency's capabilities and needs?



Respondents were provided the opportunity to describe any additional opportunities to aid the partnership between states and the USFWS to increase awareness of and to address the problem of aquatic invasive species. In addition, respondents also provided comments about the survey and their responses to the survey questions. Their responses/comments are shown below.

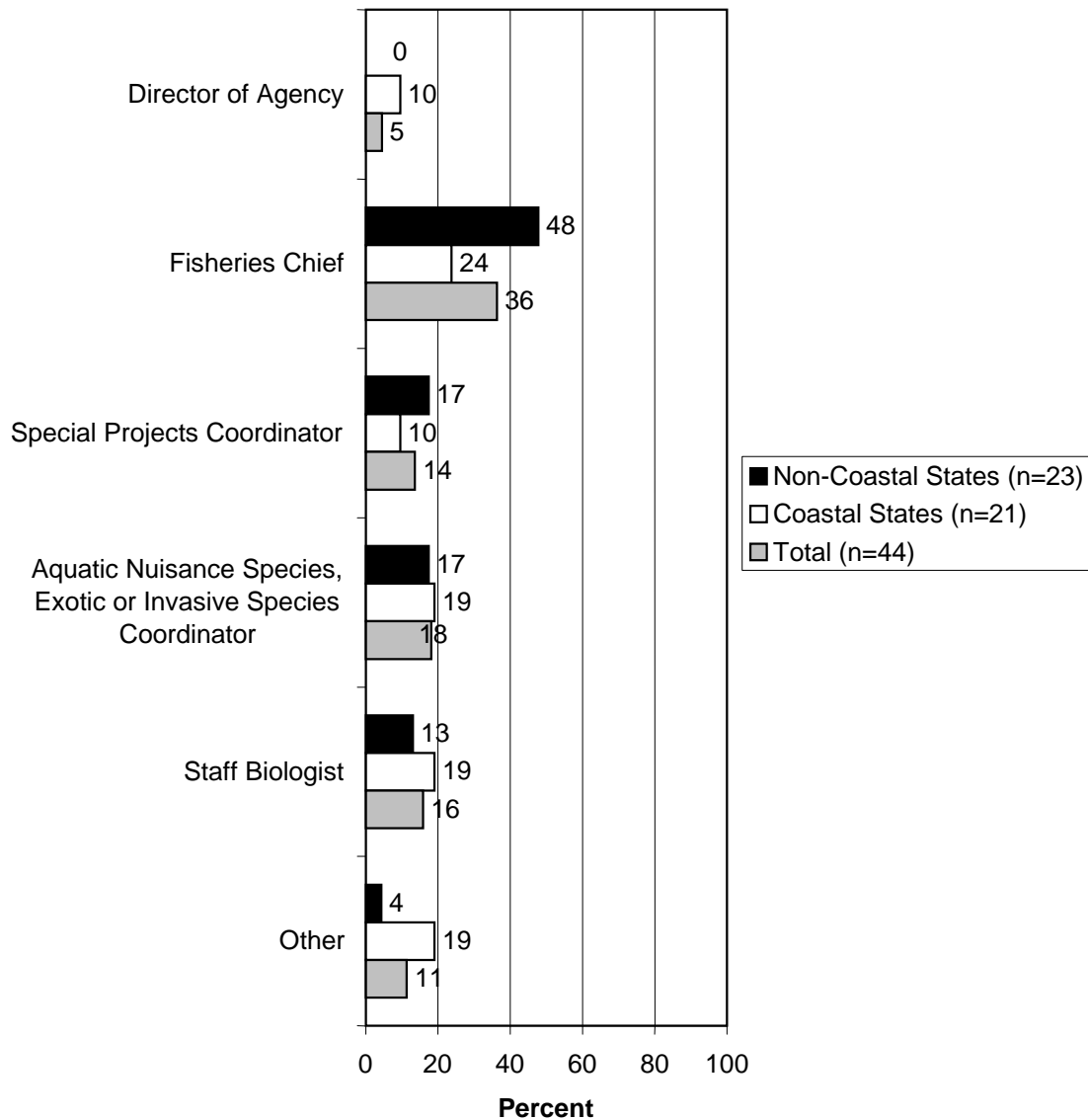
Q49. Finally, please describe any additional opportunities you may know of to aid the partnership between states and the FWS to increase awareness and address the aquatic invasive species issues discussed in this survey.

An opportunity is a facilitated joint meeting at the regional level to discuss the survey, role of the USFWS, and future of aquatic invasive species efforts.
I completed the survey in coordination with the MD DNR Invasive Species Coordinator; because of this, some answers may be inconsistent.
It is critical that the USFWS recognize authority of state wildlife agencies and work to develop equitable partnerships.
An opportunity is the exotic species section of the American Fisheries Society MICRA ANS Committee.
An opportunity is funding for brochures and other educational materials, like PowerPoint presentations, on certain issues.
The USFWS needs to interact with the state agencies to get ANS activities underway; present a workshop and provide funds to states.
The USFWS should take a more aggressive role prohibiting transportation of AIS, strengthen coordination of regional act, establish funding mechanism for state.
An opportunity is to have a formal representative from each of the regional panels on the National Invasive Species Task Force (chaired by USFWS).
If all the above happens, then that's plenty.
There needs to be increased awareness about programs/partnerships. Needs can be evaluated with funding/personnel as limiting factors.
Need an assessment of ANS issue vs. other environmental problems. I think we are not spending enough on ANS issues.
There needs to be a network established that coordinates movement of aquatic species over state boundaries.
Ohio seems to be doing OK, but needs adjacent states and others to develop state ANS plans.
Pacific States Marine Fisheries Commission is taking the lead for monitoring and detection in Idaho the last 2 years.
SD struggles to find staff time and funding. There needs to be more federal involvement in the regulation of ANS and sharing of funds for ANS programs.
Service bureaucracy must learn to work closely with the states—to listen, to respond to their concerns, with dialog and programs.
We're not aware of specific opportunities to aid the partnership between states and the USFWS on issue of aquatic invasive species.

TITLES OF THOSE COMPLETING THE SURVEY

Respondents' titles were as shown in the graph below and tabulation that follows.

Q10. Which of the following best describes the title of the person filling out this survey?



Other titles of respondents are shown in the tabulation below.

Other Titles of Respondents

ANS Supervisor Regional Fisheries Supervisor
Bureau Chief, Division of Freshwater Fisheries
Staff Biologist (also Aquatic Nuisance Wildlife Species Coordinator)
Staff of DNR