107TH CONGRESS 2D SESSION

S. 2964

To amend the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to reauthorize and improve that Act.

IN THE SENATE OF THE UNITED STATES

September 18, 2002

Mr. Levin (for himself, Ms. Collins, Ms. Stabenow, Mr. Dewine, Mr. Reed, Mr. Warner, Mr. Durbin, Mr. Fitzgerald, Mr. Akaka, Mr. Voinovich, Mr. Inouye, Ms. Cantwell, Mr. Kennedy, and Mr. Bayh) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to reauthorize and improve that Act.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.
- 4 (a) Short Title.—This Act may be cited as the
- 5 "National Aquatic Invasive Species Act of 2002".
- 6 (b) Table of Contents.—The table of contents of
- 7 this Act is as follows:
 - Sec. 1. Short title; table of contents.
 - Sec. 2. Findings.

Sec. 3. Definitions.

TITLE I—AQUATIC INVASIVE SPECIES MANAGEMENT

- Sec. 101. Program coordination.
- Sec. 102. Federal consistency.
- Sec. 103. International coordination.
- Sec. 104. Prevention of introduction of aquatic invasive species into waters of the United States by vessels.
- Sec. 105. Prevention of the introduction of aquatic invasive species into waters of the United States by other pathways.
- Sec. 106. Early detection and monitoring.
- Sec. 107. Containment and control.
- Sec. 108. Brown tree snake control program.
- Sec. 109. Information, education, and outreach.

TITLE II—AQUATIC INVASIVE SPECIES RESEARCH

- Sec. 201. Ecological, pathway, and experimental research.
- Sec. 202. Analysis.
- Sec. 203. Vessel pathway standards research.
- Sec. 204. Graduate education in systematics and taxonomy.

TITLE III—AUTHORIZATION OF APPROPRIATIONS

Sec. 301. Authorization of appropriations.

TITLE IV—CONFORMING AMENDMENTS

Sec. 401. Conforming amendments.

1 SEC. 2. FINDINGS.

- 2 Congress finds that—
- 3 (1) invasive species can cause devastating de-
- 4 clines in local, regional, and national species diver-
- 5 sity;
- 6 (2) aquatic invasive species continue to be in-
- 7 troduced into water of the United States;
- 8 (3) aquatic invasive species damage infrastruc-
- 9 ture, disrupt commerce, outcompete native species,
- reduce biodiversity, and threaten human health;

1	(4) the direct and indirect costs of aquation
2	invasive species to the economy of the United States
3	amount to billions of dollars per year;
4	(5) in the Great Lakes region, approximately
5	\$3,000,000,000 has been spent in the past 10 years
6	to mitigate the damage caused by a single invasive
7	species, the zebra mussel;
8	(6) recent studies have—
9	(A) demonstrated that, in addition to eco-
10	nomic damage, invasive species can cause enor-
11	mous ecological damage; and
12	(B) cited invasive species as the second
13	leading threat to endangered species;
14	(7) over the past 200 years, the rate of detected
15	marine and freshwater invasions in North America
16	has increased exponentially;
17	(8) wetlands suffer compound impacts from—
18	(A) terrestrial infestations (such as Nu-
19	tria);
20	(B) aquatic infestations (such as Hydrilla)
21	and
22	(C) riparian infestations (such as Purple
23	Loosestrife);
24	(9) the rate of invasions continues to be unac-
25	centable.

1	(10) infestations by aquatic invasive species
2	often spread and cause significant, negative regional,
3	national, and international effects;
4	(11) prevention of aquatic invasive species is
5	the most environmentally sound and cost-effective
6	management approach because once established,
7	aquatic invasive species are costly, and sometimes
8	impossible to control;
9	(12) to be effective, the prevention, early detec-
10	tion, and control of and rapid response to aquatic
11	invasive species should be coordinated regionally, na-
12	tionally, and internationally;
13	(13) research underlies every aspect of detect-
14	ing, preventing, controlling, and eradicating invasive
15	species, educating citizens and stakeholders, and re-
16	storing ecosystems;
17	(14) pathway management is the most prom-
18	ising approach to reducing unplanned introductions
19	of aquatic invasive species;
20	(15) consistent national screening criteria are
21	needed to evaluate the potential risk of nonnative
22	aquatic species;
23	(16) States and regions have specific problems
24	with respect to aquatic invasive species and re-

sources for addressing aquatic invasive species;

- (17) an emphasis on research, development, and demonstration to support prevention efforts would likely result in a more cost-effective and successful approach to combating invasive species through preventing initial introduction;
 - (18) research, development, and demonstration to support prevention includes monitoring of pathways and ecosystems to track the introduction and establishment of invasive species, analysis of that data, and development and testing of technologies to prevent introduction through known pathways;
 - (19) the Aquatic Invasive Species Task Force established by section 1201(a) of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4721(a)) has been directed by Congress to coordinate interagency responses to aquatic invasive species, but the provision of additional direction, and assignment of specific responsibilities, to various Federal agencies would accelerate those responses; and
 - (20) it is in the interest of the United States to conduct a comprehensive and thorough research, development, and demonstration program on aquatic invasive species in order to better understand how aquatic invasive species are introduced and become

- 1 established and to support efforts to prevent the in-
- 2 troduction and establishment of those species.
- 3 SEC. 3. DEFINITIONS.
- 4 Section 1003 of the Nonindigenous Aquatic Nuisance
- 5 Prevention and Control Act of 1990 (16 U.S.C. 4702) is
- 6 amended to read as follows:
- 7 "SEC. 1003. DEFINITIONS.
- 8 "In this Act:
- 9 "(1) ADMINISTRATOR.—The term 'Adminis-
- trator' means the Administrator of the Environ-
- 11 mental Protection Agency.
- 12 "(2) AQUATIC ECOSYSTEMS IN THE UNITED
- 13 STATES.—The term 'aquatic ecosystems in the
- 14 United States' means freshwater, marine, and estua-
- rine environments (including inland waters and wet-
- lands), located wholly or in part, in the United
- 17 States.
- 18 "(3) Assistant secretary.—The term 'As-
- 19 sistant Secretary' means the Assistant Secretary of
- the Army for Civil Works.
- 21 "(4) Ballast water.—The term 'ballast
- water' means any water (with its suspended matter)
- used to maintain the trim and stability of a vessel.

1	"(5) Coastal voyage.—The term 'coastal voy-
2	age' means a voyage conducted entirely within the
3	exclusive economic zone.
4	"(6) Control.—The term 'control' means—
5	"(A) the eradication, suppression, reduc-
6	tion, or management of an aquatic invasive spe-
7	cies population;
8	"(B) the containment of spread of an
9	aquatic invasive species; and
10	"(C) any action taken, such as restoration
11	of native species or habitat—
12	"(i) to reduce the effects of an aquatic
13	invasive species; and
14	"(ii) to prevent further invasions by
15	the aquatic invasive species.
16	"(7) DIRECTOR.—The term 'Director' means
17	the Director of the United States Fish and Wildlife
18	Service.
19	"(8) Environmentally sound.—The term
20	'environmentally sound', when used in reference to
21	any activity or thing, refers to an activity or thing
22	that prevents introductions, or controls infestations,
23	of aquatic invasive species in a manner that—
24	"(A) minimizes adverse effects on—

1	"(i) the structure and function of an
2	ecosystem; and
3	"(ii) nontarget organisms and eco-
4	systems; and
5	"(B) emphasizes the use of integrated pest
6	management techniques.
7	"(9) Exclusive economic zone.—The term
8	'exclusive economic zone' means the area comprised
9	of—
10	"(A) the Exclusive Economic Zone of the
11	United States established by Proclamation
12	Number 5030, dated March 10, 1983; and
13	"(B) the equivalent zones of Canada and
14	Mexico.
15	"(10) Great lake.—The term "Great Lake"
16	means—
17	"(A) Lake Erie;
18	"(B) Lake Huron (including Lake Saint
19	Clair);
20	"(C) Lake Michigan;
21	"(D) Lake Ontario;
22	"(E) Lake Superior;
23	"(F) the connecting channels of those
24	Lakes, including—
25	"(i) the Saint Mary's River;

1	"(ii) the Saint Clair River;
2	"(iii) the Detroit River;
3	"(iv) the Niagara River; and
4	"(v) the Saint Lawrence River to the
5	Canadian border; and
6	"(G) any other body of water located with-
7	in the drainage basin of a Lake, River, or con-
8	necting channel described in any of subpara-
9	graphs (A) through (F).
10	"(11) Great lakes region.—The term 'Great
11	Lakes region' means the region comprised of the
12	States of Illinois, Indiana, Michigan, Minnesota,
13	New York, Ohio, Pennsylvania, and Wisconsin.
14	"(12) Hydrographically distinct zones.—
15	The term 'hydrographically distinct zones' means
16	contiguous coastal areas in which (as determined by
17	the Task Force) there is the potential for the move-
18	ment of organisms, both through natural pathways
19	and a multiplicity of anthropogenic means, such that
20	the dispersal of most native organisms may not be
21	significantly altered by the movement of vessels
22	alone.
23	"(13) Indian tribe.—The term 'Indian tribe'
24	has the meaning given the term in section 4 of the

1	Indian Self-Determination and Education Assistance
2	Act (25 U.S.C. 450b).
3	"(14) Interbasin waterway.—The term
4	'interbasin waterway' means a waterway that con-
5	nects 2 distinct water basins.
6	"(15) International joint commission.—
7	The term 'International Joint Commission' means
8	the commission established by article VII of the
9	Treaty relating to boundary waters and questions
10	arising along the boundary between the United
11	States and Canada, signed at Washington on Janu-
12	ary 11, 1909 (36 Stat. 2448; TS 548).
13	"(16) Interstate organization.—The term
14	'interstate organization' means an entity that—
15	"(A) is established by—
16	"(i) an interstate compact approved
17	by Congress;
18	"(ii) an Act of Congress; or
19	"(iii) an international agreement to
20	which the United States is a party;
21	"(B)(i) represents 2 or more—
22	"(I) States (or political subdivisions of
23	States); or
24	"(II) Indian tribes;
25	"(ii) represents—

1	"(I) 1 or more States (or political
2	subdivisions of States); and
3	"(II) 1 or more Indian tribes; or
4	"(iii) represents the Federal Government
5	and 1 or more foreign governments; and
6	"(C) has jurisdiction over, serves as a
7	forum for coordinating, or otherwise has a role
8	or responsibility for the management of, any
9	land or other natural resource.
10	"(17) Introduction.—The term 'introduction'
11	means the transfer of an organism to an ecosystem
12	outside the historic range of the species of which the
13	organism is a member.
14	"(18) Invasion.—The term 'invasion' means
15	an infestation of an aquatic invasive species.
16	"(19) Invasive species.—The term 'invasive
17	species' means a nonindigenous species the introduc-
18	tion of which into an ecosystem may cause harm to
19	the economy, environment, human health, recreation,
20	or public welfare.
21	"(20) Invasive species council.—The term
22	'Invasive Species Council' means the interagency
23	council established by section 3 of Executive Order
24	No. 13112 (42 U.S.C. 4321 note).

- "(21) NEW SOURCE.—The term 'new source'
 means any source of nonnative species that may be
 introduced by construction that is commenced after
 the publication of a proposed regulation prescribing
 a standard of performance under this Act that is applicable to the source, if the standard is subsequently promulgated in accordance with this Act.
 - "(22) Nonindigenous species' means any species that enters an ecosystem outside the historic range of the species.
 - "(23) Organism in trade' means an organism of a species or subspecies that has a documented history of being commercially imported during the period beginning on January 1, 1990, and ending on January 1, 2002.
 - "(24) Organism transfer' means the movement of an organism of any species from 1 ecosystem to another ecosystem.
- 22 "(25) Pathway.—The term 'pathway' means 1 23 or more routes by which an invasive species is trans-24 ferred from 1 ecosystem to another.

1	"(26) PILOT SCALE TEST.—The term 'pilot
2	scale test' means a test—
3	"(A) that is conducted at less than full-
4	scale; but
5	"(B) the results of which can potentially
6	be extrapolated to the full scale.
7	"(27) Planned importation.—The term
8	'planned importation' means the purposeful move-
9	ment of a species into the territorial limits of the
10	United States.
11	"(28) REGIONAL PANEL.—The term 'regional
12	panel' means a panel convened in accordance with
13	section 1203.
14	"(29) Secretary.—The term 'Secretary'
15	means the Secretary of the department in which the
16	Coast Guard is operating.
17	"(30) Species.—The term 'species' means—
18	"(A) a fundamental category of taxonomic
19	classification, ranking below a genus or
20	subgenus, and consisting of related organisms
21	capable of interbreeding; and
22	"(B) any viable biological material, as de-
23	termined by the Task Force.

- 1 "(31) TASK FORCE.—The term 'Task Force'
 2 means the Aquatic Invasive Species Task Force es3 tablished by section 1201(a).
- "(32) TERRITORIAL SEA.—The term 'territorial sea' means the belt of the sea measured from the baseline of the United States determined in accordance with international law, as set forth in Presidential Proclamation Number 5928, dated December 27, 1988.
 - "(33) TREATMENT.—The term 'treatment' means a mechanical, physical, chemical, biological, or other process or method of killing, removing, or rendering infertile, harmful organisms.
 - "(34) Type approval.—The term 'type approval' means an approval procedure under which a type of system is certified as meeting a standard established by law (including a regulation) for a particular application.
 - "(35) Under Secretary.—The term 'Under Secretary' means the Under Secretary of Commerce for Oceans and Atmosphere.
- 22 "(36) UNDESIRABLE IMPACT.—The term 'unde-23 sirable impact' means economic, aesthetic, or envi-24 ronmental degradation that is not necessary for, and

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1	is not clearly outweighed by, public health, environ-
2	mental, or welfare benefits.
3	"(37) Waters of the united states.—
4	"(A) IN GENERAL.—The term 'waters of
5	the United States' means the navigable waters
6	and territorial sea of the United States.
7	"(B) Inclusion.—The term 'waters of the
8	United States' includes the Great Lakes.".
9	TITLE I—AQUATIC INVASIVE
10	SPECIES MANAGEMENT
11	SEC. 101. PROGRAM COORDINATION.
12	(a) Membership of Task Force.—Section 1201(b)
13	of the Nonindigenous Aquatic Nuisance Prevention and
14	Control Act of 1990 (16 U.S.C. 4721) is amended—
15	(1) in paragraph (6), by striking "and" at the
16	end;
17	(2) by redesignating paragraph (7) as para-
18	graph (10); and
19	(3) by inserting after paragraph (6) the fol-
20	lowing:
21	"(7) the Director of the United States Geologi-
22	cal Survey;
23	"(8) the Director of the Smithsonian Environ-
24	mental Research Center;
25	"(9) the Secretary of State; and".

1	(b) Coordination With Invasive Species Coun-
2	CIL.—Section 1201(f) of the Nonindigenous Aquatic Nui-
3	sance Prevention and Control Act of 1990 (16 U.S.C.
4	4721(f)) is amended—
5	(1) by striking "Each Task Force member" and
6	inserting the following:
7	"(1) In general.—Each member of the Task
8	Force"; and
9	(2) by adding at the end the following:
10	"(2) Invasive species council.—The
11	Invasive Species Council shall—
12	"(A) coordinate and cooperate with the
13	Task Force in carrying out the duties of the
14	Invasive Species Council relating to aquatic
15	invasive species;
16	"(B) not later than 2 years after the date
17	of enactment of the National Aquatic Invasive
18	Species Act of 2002, and every 3 years there-
19	after, submit to Congress a report that summa-
20	rizes the status of the conduct of activities au-
21	thorized by and required under this Act; and
22	"(C) establish any regional panels or task
23	forces in coordination with the regional panels
24	of the Task Force convened under section
25	1203.".

- 1 (c) REGIONAL COORDINATION.—Section 1203 of the
- 2 Nonindigenous Aquatic Nuisance Prevention and Control
- 3 Act of 1990 (16 U.S.C. 4723) is amended by adding at
- 4 the end the following:
- 5 "(d) Annual Inter-Regional Meeting.—The
- 6 Task Force shall annually convene all regional panels es-
- 7 tablished pursuant to this Act for the purpose of informa-
- 8 tion transfer between and among panels, and between the
- 9 panels and the Task Force, regarding aquatic invasive
- 10 species management.".
- 11 (d) Organizations.—Section 1203 of the Non-
- 12 indigenous Aquatic Nuisance Prevention and Control Act
- 13 of 1990 (16 U.S.C. 4723) (as amended by subsection (c))
- 14 is amended by adding at the end the following:
- 15 "(e) Organizations.—An interstate organization
- 16 that has a Federal charter authorized by law, interstate
- 17 agreement, or executive order for purposes of fisheries or
- 18 natural resource management may receive funds under
- 19 this Act to implement activities authorized under this
- 20 Act.".
- 21 (e) Coordination With Other Programs.—Sec-
- 22 tion 1202(c) of the Nonindigenous Aquatic Nuisance Pre-
- 23 vention and Control Act of 1990 (16 U.S.C. 4722(c)) is
- 24 amended by adding at the end the following:
- 25 "(3) Recommendations for lists.—

1	"(A) IN GENERAL.—The Task Force shall
2	annually recommend to Federal agencies of ju-
3	risdiction such additions of aquatic invasive
4	species as the Task Force determines to be ap-
5	propriate for inclusion on—
6	"(i) any list of species of wildlife
7	under the Lacey Act Amendments of 1981
8	(16 U.S.C. 3371 et seq.);
9	"(ii) any list of noxious weeds under
10	the Plant Protection Act (7 U.S.C. 7701 et
11	seq.) (including regulations promulgated
12	under that Act contained in part 360 of
13	title 7, Code of Federal Regulations (or
14	any successor regulations)); or
15	"(iii) any list of species of wildlife
16	under part 16 of title 50, Code of Federal
17	Regulations (or any successor regulations).
18	"(B) Process.—The Task Force may use
19	the screening process developed pursuant to
20	section 1105 to identify species pursuant to
21	subparagraph (A).".
22	(f) STATE AQUATIC INVASIVE SPECIES MANAGE-
23	MENT PLANS.—Section 1204(a) of the Nonindigenous
24	Aquatic Nuisance Prevention and Control Act of 1990 (16
25	U.S.C. 4724(a)) is amended—

1	(1) in paragraph (1), by inserting "(including
2	tribal governments within a State)" after "Indian
3	tribes'';
4	(2) in paragraph (2)—
5	(A) in subparagraph (A), by inserting be-
6	fore the semicolon at the end the following: ",
7	including, in accordance with guidelines issued
8	by the Task Force under paragraph (5)—
9	"(i) rapid response contingency strate-
10	gies under section 1211;
11	"(ii) early detection strategies under
12	section $1211(a)(2)(D);$
13	"(iii) aquatic plant control programs
14	under section 1210; and
15	"(iv) screening of planned introduc-
16	tions pursuant to section 1105"; and
17	(B) in subparagraph (D), by inserting "in-
18	clude" after "(D)"; and
19	(3) by adding at the end the following:
20	"(5) Guidelines.—
21	"(A) IN GENERAL.—Not later than 1 year
22	after the date of enactment of the National
23	Aquatic Invasive Species Act of 2002, the Task
24	Force shall publish in the Federal Register
25	guidelines for the development of plans under

1	this subsection, including guidelines for report-
2	ing progress in implementing the plans, to en-
3	courage consistency in implementation of and
4	reporting under those plans.
5	"(B) Guidelines.—The guidelines pub-
6	lished under subparagraph (A) shall include, for
7	the purpose of paragraph (2)(A), guidelines
8	concerning—
9	"(i) rapid response contingency strate-
10	${ m gies};$
11	"(ii) early detection and monitoring
12	strategies;
13	"(iii) aquatic plant control programs;
14	"(iv) screening of planned introduc-
15	tions pursuant to section 1105; and
16	"(v) the review and revision of re-
17	quirements of this subsection and the re-
18	approval process under this subsection.
19	"(6) Relationship to other plans.—
20	"(A) In General.—A plan approved
21	under paragraph (4) shall be deemed to meet
22	any State planning requirement of the program
23	established under section 104 of the River and
24	Harbor Act of 1958 (33 U.S.C. 610) for a plan
25	to control noxious aquatic plant growths.

1	"(B) Enforcement.—Funds provided to
2	States for implementation of plans pursuant to
3	section 1204 may be used by any Federal agen-
4	cy of jurisdiction to enforce requirements relat-
5	ing to aquatic invasive species under—
6	"(i) the Plant Protection Act (7
7	U.S.C. 7701 et seq.) (including regulations
8	promulgated under that Act contained in
9	part 360 of title 7, Code of Federal Regu-
10	lations (or any successor regulations)); or
11	"(ii) part 16 of title 50, Code of Fed-
12	eral Regulations (or any successor regula-
13	tions).
14	"(7) REVIEW AND REVISION.—Each State shall
15	periodically review and, as necessary, revise the
16	management plan of the State in accordance with
17	guidelines of the Task Force.
18	"(8) Other state management plans.—In
19	addition to the management plans required under
20	this subsection, the Director shall encourage each
21	State to develop and implement new, and expand ex-
22	isting, State management plans to improve State ac-
23	tions to prevent and control aquatic invasive spe-

cies.".

1	(g) Grant Program.—Section 1204(b)(1) of the
2	Nonindigenous Aquatic Nuisance Prevention and Control
3	Act of 1990 (16 U.S.C. 4724(b)(1)) is amended by strik-
4	ing "subsection (a) for the implementation of those
5	plans." and inserting the following: "subsection (a)—
6	"(A) to develop those plans with a total
7	amount that does not exceed 10 percent of the
8	amounts made available for grants under this
9	section for each fiscal year; and
10	"(B) to implement those plans.".
11	SEC. 102. FEDERAL CONSISTENCY.
12	Subtitle E of the Nonindigenous Aquatic Nuisance
13	Prevention and Control Act of 1990 (16 U.S.C. 4751 et
14	seq.) is amended—
15	(1) by striking the subtitle heading and insert-
16	ing the following:
17	"Subtitle E—Administration";
18	and
19	(2) by adding at the end the following:
20	"SEC. 1402. FEDERAL CONSISTENCY.
21	"To the maximum extent practicable, no Federal
22	agency shall authorize, fund, or carry out any action that
23	would likely cause or promote the introduction or spread
24	of an invasive species in the United States or any other
25	location unless the Federal agency has issued guidelines

- 1 in accordance with applicable requirements of Executive
- 2 Order 13112 (42 U.S.C. 4321 note) relating to invasive
- 3 species under which the Federal agency first determines,
- 4 and makes public the determination, that—
- 5 "(1) the benefits of the action to be authorized,
- 6 funded, or carried out clearly outweigh the potential
- 7 harm caused by the introduction or spread of an
- 8 invasive species; and
- 9 "(2) all feasible and prudent measures to mini-
- mize risk of harm will be taken in carrying out the
- 11 actions.".
- 12 SEC. 103. INTERNATIONAL COORDINATION.
- 13 Subtitle E of the Nonindigenous Aquatic Nuisance
- 14 Prevention and Control Act of 1990 (16 U.S.C. 4751 et
- 15 seq.) (as amended by section 102) is amended by adding
- 16 at the end the following:
- 17 "SEC. 1403. INTERNATIONAL COORDINATION.
- 18 "(a) In General.—The Task Force, the Invasive
- 19 Species Council, and the Secretary of State shall, to the
- 20 maximum extent practicable, coordinate activities to en-
- 21 sure that international efforts to prevent and manage
- 22 aquatic invasive species (including through the Inter-
- 23 national Maritime Organization, the International Con-
- 24 vention on the Exploration of the Sea, the Global Invasive
- 25 Species Program, and other appropriate programs) are co-

1	ordinated with policies of the United States established by
2	this Act.
3	"(b) Coordination With Neighboring Coun-
4	TRIES.—
5	"(1) In General.—The Task Force, in con-
6	sultation with the Secretary of State, shall include in
7	the report required by section 1202(m) a description
8	of the means by which international agreements and
9	regulations with countries that share a border with
10	the United States will be implemented and enforced
11	by Federal agencies (including a clarification of the
12	roles and responsibilities of those agencies).
13	"(2) Negotiations.—
14	"(A) IN GENERAL.—As soon as practicable
15	after the date of enactment of the National
16	Aquatic Invasive Species Act of 2002, the Sec-
17	retary of State may enter into negotiations
18	with—
19	"(i) Canada to issue a request that
20	the International Joint Commission, not
21	later than 18 months after the date of en-
22	actment of that Act, review, research, con-
23	duct hearings on, and submit to the parties
24	represented on the International Joint

Commission a report that describes the

1	success of current policies of governments
2	in the United States and Canada having
3	jurisdiction over the Great Lakes in antici-
4	pating and preventing biological invasions
5	of the aquatic ecosystem in the Great
6	Lakes, including—
7	"(I) an analysis of current Fed-
8	eral, State or Provincial, local, and
9	international laws and agreements;
10	"(II) an analysis of all likely
11	pathways for biological invasions of
12	the aquatic ecosystem in the Great
13	Lakes; and
14	"(III) recommendations of the
15	International Joint Commission for
16	means by which to improve the poli-
17	cies referred to in clause (i); and
18	"(ii) Mexico, to ensure coordination of
19	efforts of the United States with efforts of
20	Mexico to manage invasive species estab-
21	lished in the United States-Mexico border
22	region.".

1	SEC. 104. PREVENTION OF INTRODUCTION OF AQUATIC
2	INVASIVE SPECIES INTO WATERS OF THE
3	UNITED STATES BY VESSELS.
4	(a) In General.—Section 1101 of the Nonindige-
5	nous Aquatic Nuisance Prevention and Control Act of
6	1990 (16 U.S.C. 4711) is amended—
7	(1) by striking subsection (a) and inserting the
8	following:
9	"(a) Minimum Requirements for All Vessels
10	Entering Ports of the United States.—
11	"(1) Invasive species management plan.—
12	"(A) In general.—Effective beginning on
13	the date that is 180 days after the promulga-
14	tion of applicable guidelines or regulations
15	under the National Aquatic Invasive Species
16	Act of 2002, each vessel entering a port of the
17	United States shall have in effect an aquatic
18	invasive species management plan that pre-
19	scribes safe and effective means by which the
20	master of the vessel shall minimize introduc-
21	tions and transfers of invasive species by any
22	part of the vessel (including towed vessels), pur-
23	suant to the guidelines or regulations.
24	"(B) Specificity.—The management plan
25	shall be specific to the vessel (or group of ves-

1	sels with characteristics similar to that of the
2	vessel, as determined by the Secretary).
3	"(C) Requirements.—The management
4	plan shall include, at a minimum, such informa-
5	tion as is requested by the Secretary pursuant
6	to subparagraph (D), including—
7	"(i) operational requirements to safely
8	and effectively comply with the ballast
9	water management requirements under
10	paragraph (4);
11	"(ii) operational requirements to safe-
12	ly and effectively carry out any actions re-
13	quired under a rapid response contingency
14	strategy approved by the Secretary under
15	section 1211;
16	"(iii) other requirements specified in
17	guidelines adopted by the International
18	Maritime Organization;
19	"(iv) a description of all reporting re-
20	quirements and a copy of each form nec-
21	essary to meet those requirements;
22	"(v) the position of the officer respon-
23	sible for implementation of ballast water
24	management and reporting procedures on
25	board;

1	"(vi) documents relevant to any bal-
2	last water management equipment or pro-
3	cedures;
4	"(vii) a description of the location of
5	access points for sampling ballast or sedi-
6	ments pursuant to paragraph (3)(B)(vi);
7	"(viii) a description of requirements
8	relating to compliance with any approved
9	rapid response strategy relevant to the voy-
10	age of the vessel;
11	"(ix) a contingency strategy applicable
12	under subsection (k), if appropriate; and
13	"(x) such requirements described in
14	subsection (e) as are applicable to the ves-
15	sel.
16	"(D) Guidelines.—Not later than 18
17	months after the date of enactment of the Na-
18	tional Aquatic Invasive Species Act of 2002, the
19	Secretary shall issue final guidelines for the de-
20	velopment of invasive species management
21	plans, including guidelines that—
22	"(i) identify types of vessels for which
23	plans are required;
24	"(ii) establish processes for updating
25	and revising the plans; and

1	"(iii) establish criteria for compliance
2	with this subsection.
3	"(2) Records.—The master of a vessel shall—
4	"(A) maintain records of all ballast oper-
5	ations, for such period of time and including
6	such information as the Secretary may specify;
7	"(B) permit inspection of the records by
8	representatives of the Secretary and of the
9	State in which the port is located; and
10	"(C) transmit records to the National Bal-
11	last Information Clearinghouse established
12	under section 1102(f).
13	"(3) Best management practices.—
14	"(A) IN GENERAL.—Not later than 18
15	months after the date of enactment of the Na-
16	tional Aquatic Invasive Species Act of 2002, the
17	Secretary shall promulgate best management
18	practices to minimize and monitor the transfer
19	by vessels of organisms between
20	hydrographically distinct zones.
21	"(B) Practices to be included.—The
22	best management practices shall include—
23	"(i) regular removal or purging of
24	sediments from ballast tanks in the open
25	ocean (or in other areas in accordance with

1	guidelines adopted by the International
2	Maritime Organization) so that there is lit-
3	tle or no sediment accumulation in ballast
4	tanks of transoceanic vessels;
5	"(ii) minimization of ballast water op-
6	erations—
7	"(I) in areas with toxic algal
8	blooms, known outbreaks of aquatic
9	invasive species, and sewage outfalls;
10	"(II) in darkness, when bottom-
11	dwelling organisms may rise in the
12	water column;
13	"(III) in areas with naturally
14	high levels of suspended sediments
15	(including river mouths and deltas);
16	"(IV) in areas that have been af-
17	fected significantly by soil erosion
18	from inland drainage); and
19	"(V) in areas in which sediments
20	have been disturbed (including areas
21	near dredging operations and areas of
22	shallow water in which the propellers
23	of a vessel may have disturbed the
24	sediment);

1	"(iii) avoidance of unnecessary dis-
2	charge of ballast water in a port that was
3	taken up in another port;
4	"(iv) to the maximum extent prac-
5	ticable, collection and disposal of debris
6	from the cleaning of the hull, sea chests,
7	sea suction grids, and other hull apertures
8	so that the debris does not remain in the
9	water or fall to the seabed;
10	"(v)(I) at the time at which an anti-
11	fouling coating is applied, coating of great-
12	er than 95 percent of the surface of the
13	hull that is exposed to water below the
14	water line; and
15	"(II) reapplication of anti-fouling
16	paint prior to coating failure on any part
17	of the vessel to which an anti-fouling coat-
18	ing is applied; and
19	"(vi) provision of sample access ports
20	in ballast piping for sampling of ballast in-
21	take and discharge.
22	"(4) Design features and treatment sys-
23	TEMS FOR NEW VESSELS.—A vessel of which con-
24	struction begins on or after January 1, 2006, shall

1	be equipped with design features and ballast water
2	treatment systems that meet, at a minimum—
3	"(A) the standards described in subsection
4	(e)(1)(B)(ii); or
5	"(B) on promulgation of final standards
6	pursuant to subsection (e)(2)(A), such final
7	standard as is applicable to the vessel.";
8	(2) in subsection (b), by adding at the end the
9	following:
10	"(5) Additional requirements for vessels
11	ENTERING GREAT LAKES AFTER OPERATING OUT-
12	SIDE THE EEZ.—
13	"(A) IN GENERAL.—Not later than the
14	date that is 18 months after the date of enact-
15	ment of the National Aquatic Invasive Species
16	Act of 2002, the Secretary shall—
17	"(i) review and revise regulations pro-
18	mulgated under this section; and
19	"(ii) promulgate the revised regula-
20	tions.
21	"(B) Contents.—The revised regulations
22	shall include—
23	"(i) requirements under subsections
24	(a) and (e) (as amended by that Act); and

1	"(ii) such other provisions as are nec-
2	essary to improve the effectiveness of the
3	program under this Act to prevent intro-
4	ductions of aquatic invasive species into
5	the Great Lakes.";
6	(3) by striking subsections (c) through (f) and
7	subsection (h);
8	(4) by redesignating subsection (g) as sub-
9	section (h);
10	(5) by inserting after subsection (b) the fol-
11	lowing:
12	"(c) Additional Requirements for Vessels En-
13	TERING UNITED STATES PORTS AFTER OPERATING OUT-
14	SIDE EEZ.—
15	"(1) In general.—Effective beginning on the
16	date that is 18 months after the date of enactment
17	of the National Aquatic Invasive Species Act of
18	2002, in addition to complying with applicable re-
19	quirements under subsection (a) and except as pro-
20	vided in subsection (e)(2)(B)(v), each vessel
21	equipped with a ballast water tank that, after oper-
22	ating on the waters beyond the exclusive economic
23	zone, enters a United States port, other than a
24	United States port on the Great Lakes, shall comply

1	with the regulations promulgated under paragraph
2	(2).
3	"(2) REGULATIONS.—Not later than 18 months
4	after the date of enactment of the National Aquatic
5	Invasive Species Act of 2002, the Secretary shall
6	promulgate, with the concurrence of the Adminis-
7	trator, regulations to implement this subsection
8	that—
9	"(A) ensure, to the maximum extent prac-
10	ticable, that aquatic invasive species are not
11	discharged into waters of the United States
12	from vessels, including through requirements
13	consistent with interim and final standards
14	issued under paragraph (1)(B)(ii) or (2) of sub-
15	section (e), as applicable;
16	"(B) apply to all vessels described in para-
17	graph (1);
18	"(C) protect the safety of—
19	"(i) each vessel; and
20	"(ii) the crew and passengers of each
21	vessel;
22	"(D) direct a vessel described in paragraph
23	(1)—
24	"(i) to carry out the exchange of bal-
25	last water of the vessel in waters beyond

1	the exclusive economic zone in accordance
2	with the standards and certification proce-
3	dures promulgated under subsection (e);
4	"(ii) in a case in which the master of
5	the vessel determines that compliance with
6	clause (i) is impracticable, to exchange the
7	ballast water of the vessel in other waters
8	in which the exchange does not pose a
9	threat of invasion or spread of nonindige-
10	nous species in waters of the United
11	States, as designated by the Secretary; or
12	"(iii) use environmentally sound alter-
13	native ballast water management methods,
14	including modification of the vessel ballast
15	water tanks and intake systems, if the Sec-
16	retary determines that such alternative
17	methods are in accordance with standards
18	and certification procedures promulgated
19	under subsection (e);
20	"(E) provide for in-line sampling proce-
21	dures of ballast piping to monitor compliance
22	with the regulations;
23	"(F) take into consideration—
24	"(i) vessel types;

1	"(ii) variations in the ecological condi-
2	tions of waters and coastal areas of the
3	United States; and
4	"(iii) different operating conditions;
5	and
6	"(G) are based on the best scientific infor-
7	mation available.
8	"(d) Additional Requirement for Vessels En-
9	GAGED IN COASTAL VOYAGES.—
10	"(1) In general.—A vessel engaged in a
11	coastal voyage shall minimize the introduction and
12	spread of an aquatic invasive species between
13	hydrographically distinct zones in a manner that is
14	consistent with limitations and requirements on
15	transoceanic voyages imposed under the final stand-
16	ard promulgated and applied under subsection
17	(e)(2).
18	"(2) Designation of Hydrographically
19	DISTINCT ZONES.—Not later than 18 months after
20	the date of enactment of the National Aquatic
21	Invasive Species Act of 2002, and periodically there-
22	after but not less frequently than once every 3 years,
23	the Task Force shall, based on available research
24	and monitoring data and in consultation with re-
25	gional panels of the Task Force, with the concur-

1	rence of the Secretary, designate hydrographically
2	distinct zones for purposes of this Act.
3	"(e) Ballast Water Management Standards
4	AND CERTIFICATION PROCEDURES.—
5	"(1) Interim standards.—
6	"(A) IN GENERAL.—Not later than 1 year
7	after the date of enactment of the National
8	Aquatic Invasive Species Act of 2002, the Sec-
9	retary, with the concurrence of the Adminis-
10	trator and in consultation with the Task Force,
11	shall promulgate regulations establishing in-
12	terim standards indicating acceptable—
13	"(i) operational performance for bal-
14	last water exchange (including contingency
15	procedures in instances in which a safety
16	exemption is used pursuant to subsection
17	(k); and
18	"(ii) biological effectiveness of ballast
19	water treatment systems (including on-
20	shore facilities and facilities on board ves-
21	sels).
22	"(B) Requirements.—
23	"(i) Ballast water exchange.—
24	The interim standard for ballast water ex-

1	change described in subparagraph (A) shall
2	require—
3	"(I) at least 1 empty-and-refill
4	cycle on the high sea or in an alter-
5	native exchange area designated by
6	the Secretary, of each ballast tank
7	that contains ballast water to be dis-
8	charged into waters of the United
9	States;
10	"(II) in a case in which the mas-
11	ter of a vessel determines that compli-
12	ance with subclause (I) is impracti-
13	cable, a sufficient number of flow-
14	through exchanges of ballast water, on
15	the high sea or in an alternative ex-
16	change area designated by the Sec-
17	retary, to achieve replacement of at
18	least 95 percent of ballast water in
19	ballast tanks of the vessel, as deter-
20	mined by a certification dye study
21	conducted or model developed in ac-
22	cordance with protocols developed
23	under paragraph (5)(B)(i) and re-
24	corded in the management plan of a

1	vessel pursuant to subsection
2	(a)(1)(C)(i); and
3	"(III) an approved contingency
4	procedure using best practicable tech-
5	nology in instances in which a ballast
6	water exchange is not undertaken
7	pursuant to subsection (k).
8	"(ii) Ballast system design and
9	WATER TREATMENT SYSTEMS.—The in-
10	terim standard for a ballast water system
11	design and treatment system described in
12	subparagraph (A) shall require that at
13	least 95 percent of each of the live aquatic
14	vertebrates, invertebrates, phytoplankton,
15	and macroalgae, respectively, in ballast
16	water taken in by a vessel or class of ves-
17	sels be killed or removed from ballast dis-
18	charge in the qualified type approved proc-
19	ess promulgated under paragraph
20	(5)(B)(ii)
21	"(iii) Criteria; period of effec-
22	TIVENESS.—The interim standards de-
23	scribed in clauses (i) and (ii) shall—

1	"(I) meet occupational safety and
2	environmental soundness criteria de-
3	scribed in paragraph (6); and
4	"(II) cease to apply on the effec-
5	tive date of final standards developed
6	pursuant to subsection $(e)(2)$.
7	"(2) Final standards.—
8	"(A) IN GENERAL.—Not later than 4 years
9	after the date of enactment of the National
10	Aquatic Invasive Species Act of 2002, the Sec-
11	retary and the Administrator, in consultation
12	with the Task Force, shall promulgate final
13	standards for ballast water discharge and other
14	vessel operations determined to pose a signifi-
15	cant risk to the environment through the intro-
16	duction of nonnative species.
17	"(B) Requirements.—The final stand-
18	ards shall—
19	"(i) result from application of the best
20	available technology that is economically
21	achievable for—
22	"(I) the applicable category or
23	class of vessels; and
24	"(II) the new source or existing
25	source status;

1	"(ii) have the goal of eliminating the
2	risk of introduction into waters of the
3	United States by vessels of nonnative spe-
4	cies, including plant, animal, and human
5	pathogens;
6	"(iii) consider findings of scientific
7	and policy research, including research
8	conducted pursuant to title II, particularly
9	section 203;
10	"(iv) apply to all methods of ballast
11	water management and system design, in-
12	cluding—
13	"(I) ballast water exchange;
14	"(II) ballast water treatment sys-
15	tems; and
16	"(III) other vessel operations de-
17	termined to pose a significant risk to
18	the environment through the introduc-
19	tion of nonnative organisms;
20	"(v) be measurable;
21	"(vi) be reviewed and, as appropriate,
22	revised not less often than every 3 years
23	pursuant to subsection $(g)(1)$;

1	"(vii) meet occupational safety and
2	environmental soundness criteria described
3	in paragraph (6); and
4	"(viii) apply beginning not later than
5	October 1, 2011.
6	"(3) Experimental approval for ballast
7	WATER TREATMENT.—
8	"(A) In general.—Subject to subpara-
9	graph (B), if, before the date on which the Sec-
10	retary promulgates interim ballast water man-
11	agement standards under paragraph (1), an
12	owner or operator of a vessel seeks to conduct
13	a treatment of ballast water—
14	"(i) the owner or operator shall apply
15	to the Secretary for experimental approval
16	of the treatment; and
17	"(ii) the Secretary shall approve the
18	treatment if—
19	"(I) the owner or operator pro-
20	vides to the Secretary peer-reviewed,
21	pilot-scale information relating to the
22	effectiveness and environmental
23	soundness of the treatment;
24	"(II) the Secretary and the Ad-
25	ministrator, in consultation with the

1	Task Force (including relevant re-
2	gional panels, and the Ballast Water
3	and Shipping Committee, of the Task
4	Force), determine that the technology
5	to be used for the treatment has sig-
6	nificant potential to kill or remove at
7	least 95 percent of the aquatic
8	vertebrates, invertebrates, phyto-
9	plankton, and macro algae, respec-
10	tively, in ballast water taken in by the
11	class of vessel for which the treatment
12	is sought to be conducted; and
13	"(III) the Administrator deter-
14	mines that the treatment meets envi-
15	ronmental regulations.
16	"(B) Limitations.—
17	"(i) Period of Testing.—Testing of
18	the treatment system approved under this
19	section may cease prior to the termination
20	of the approval period described in clause
21	(ii).
22	"(ii) Period of Approval.—Ap-
23	proval granted under subparagraph (A)
24	shall be for the lesser of—

1	"(I) a period of 10 years or the
2	expected life of the treatment system,
3	whichever is earlier; or
4	"(II) such period of time for
5	which the Secretary or Administrator
6	(as appropriate) determines that
7	(based on available information, in-
8	cluding information developed pursu-
9	ant to clause (iii)) there exists a seri-
10	ous deficiency in performance or envi-
11	ronmental soundness of the system
12	relative to anticipated performance or
13	environmental soundness.
14	"(iii) Information.—As a condition
15	of receiving experimental approval for a
16	treatment under subparagraph (A)(ii), the
17	owner or operator of a vessel shall agree to
18	collect and report such information regard-
19	ing the operational and biological effective-
20	ness of the treatment through sampling of
21	the intake and discharge ballast as the
22	Secretary may request.
23	"(iv) Renewal.—An experimental
24	approval may be renewed pursuant to
25	paragraph (7)(B)(ii)(III).

1	"(4) Incentives for use of treatment sys-
2	TEMS.—
3	"(A) IN GENERAL.—The Secretary and the
4	Administrator shall assist owners or operators
5	of vessels that seek to obtain experimental or
6	interim approval for installation of ballast water
7	treatment systems, including through providing
8	guidance on—
9	"(i) a sampling protocol and test pro-
10	gram for cost effective treatment evalua-
11	tion;
12	"(ii) sources of sampling equipment
13	and field biological expertise; and
14	"(iii) examples of shipboard evalua-
15	tion studies.
16	"(B) Preference.—The Secretary of the
17	Interior and the Secretary of Commerce shall
18	give preference to grant applications submitted
19	under section 1104(b) for research relative to
20	tests on vessels of treatment systems that have
21	received approval for ballast water treatment
22	under paragraphs (1) and (3).
23	"(C) Annual summaries.—The Secretary
24	shall annually summarize, and make available
25	to interested parties, all available information

1 on the performance of technologies proposed for 2 ballast treatment to facilitate the application 3 process for experimental approval for ballast 4 water treatment under paragraph (3). 5 "(5) Certification process.— 6 "(A) IN GENERAL.—Not later than the 7 date on which interim standards are promul-8 gated under paragraph (1) and final standards 9 are promulgated under paragraph (2), the Secretary shall establish, with the concurrence of 10 11 the Administrator, a certification process for 12 use in determining compliance of vessels with 13 the standards. 14 "(B) REQUIREMENTS.—In carrying out 15 subparagraph (A), the Secretary shall establish 16 by regulation— 17 "(i) a certification protocol for ballast 18 water exchange involving dye studies or 19 models detailing flow dynamics of vessels 20 described in paragraph (1)(B)(i)(II); and "(ii) a shipboard protocol for qualified 21 22 type approval of ballast water treatment 23 systems for the interim and final standards

described in paragraphs (1) and (2) that—

1	"(I) is capable of determining the
2	extent to which a ballast water treat-
3	ment system complies with applicable
4	standards for the prevention of the
5	transfer of aquatic organisms, includ-
6	ing limitations on that compliance
7	caused by—
8	"(aa) biological, chemical, or
9	physical conditions of water
10	taken into ballast; and
11	"(bb) conditions encountered
12	during a voyage;
13	"(II) is capable of determining
14	the extent to which a ballast water
15	treatment system—
16	"(aa) is environmentally
17	sound, based on criteria promul-
18	gated by the Administrator under
19	paragraph (6)(A);
20	"(bb) is safe for vessel and
21	crew; and
22	"(cc) complies with this Act;
23	"(III) may be used in estimating
24	the expected useful life of the ballast
25	water treatment system, as deter-

1	mined on the basis of voyage patterns
2	and normal use conditions;
3	"(IV) may include a shore-based
4	testing component;
5	"(V) is applicable to a specific
6	vessel or group of vessels, as deter-
7	mined by the Secretary;
8	"(VI) includes such limitations as
9	are appropriate;
10	"(VII) provides for appropriate
11	monitoring; and
12	"(VIII) is cost effective.
13	"(6) Environmental soundness criteria
14	FOR BALLAST TREATMENTS.—
15	"(A) In General.—The Administrator
16	shall include in criteria promulgated under sec-
17	tion 1202(k)(1)(A) specific criteria—
18	"(i) to ensure environmental sound-
19	ness of ballast treatment systems; and
20	"(ii) to grant environmental sound-
21	ness exceptions under subparagraph (B).
22	"(B) Exceptions.—
23	"(i) In general.—In reviewing appli-
24	cations under paragraph (7)(B)(i)(I) in an
25	emergency situation to achieve reductions

1	in significant and acute risk of transfers of
2	invasive species by vessels, the Secretary
3	and the Administrator may jointly deter-
4	mine to make an exception to criteria de-
5	scribed in subparagraph (A)(i).
6	"(ii) Qualification of approv-
7	ALS.—To be eligible for an exception under
8	clause (i), an approval under paragraph
9	(7)(B)(i)(I) shall be qualified under para-
10	graph (7)(B)(ii).
11	"(7) Application.—
12	"(A) IN GENERAL.—The owner or operator
13	of a ballast water treatment system shall sub-
14	mit to the Secretary and the Administrator an
15	application for qualified type approval of the
16	ballast water treatment system that is in such
17	form and contains such information as the Sec-
18	retary may require.
19	"(B) Approval and disapproval.—
20	"(i) In general.—On receipt of an
21	application under subparagraph (A)—
22	"(I) the Administrator shall, not
23	later than 90 days after the date of
24	receipt of the application—

1	"(aa) review the application
2	for compliance and consistency
3	with environmental soundness
4	criteria promulgated under para-
5	graph $(6)(A)$; and
6	"(bb) approve those ballast
7	water treatment systems that
8	meet those criteria; and
9	"(II) the Secretary, in coopera-
10	tion with the Task Force, shall, not
11	later than 180 days after the date of
12	receipt of the application—
13	"(aa) determine whether the
14	ballast water treatment system
15	covered by the application meets
16	the requirements of this sub-
17	section, as appropriate;
18	"(bb) approve or disapprove
19	the application; and
20	"(cc) provide the applicant
21	written notice of approval or dis-
22	approval.
23	"(ii) Limitations.—An application
24	approved under clause (i) shall—

1	"(I) be qualified with any limita-
2	tions relating to voyage pattern, dura-
3	tion, or any other characteristic that
4	may affect the effectiveness or envi-
5	ronmental soundness of the ballast
6	water treatment system covered by
7	the application, as determined by the
8	Secretary in consultation with the Ad-
9	ministrator;
10	"(II) be valid for the lesser of—
11	"(aa) the expected useful life
12	of the ballast water treatment
13	system;
14	"(bb) 10 years; or
15	"(cc) such period of time for
16	which the Secretary or Adminis-
17	trator (as appropriate) deter-
18	mines that (based on available in-
19	formation, including information
20	developed pursuant to subsection
21	(e)(3)(B)(iii)) there exists a seri-
22	ous deficiency in performance or
23	environmental soundness of the
24	system relative to anticipated

1	performance or environmental
2	soundness; and
3	"(III) be renewed if—
4	"(aa) the Secretary deter-
5	mines that the ballast water
6	treatment system remains in
7	compliance with applicable stand-
8	ards as of the date of application
9	for renewal; or
10	"(bb) the remaining useful
11	life of the vessel is less than 10
12	years.
13	"(8) Penalties.—Paragraphs (1) and (2) of
14	subsection (h) shall apply to a violation of a regula-
15	tion promulgated under this subsection.
16	"(f) Coordination With Other Agencies.—The
17	Secretary may coordinate with, and (with consent) use the
18	expertise, facilities, members, or personnel of, appropriate
19	Federal and State agencies and organizations that have
20	routine contact with vessels, as determined by the Sec-
21	retary.
22	"(g) Periodic Review and Revision, and Effec-
23	TIVE DATE, OF REGULATIONS.—
24	"(1) Periodic review and revision.—

1	"(A) IN GENERAL.—Not later than 3 years
2	after the date of enactment of the National
3	Aquatic Invasive Species Act of 2002, and not
4	less often than every 3 years thereafter, the
5	Secretary shall (with the concurrence of the Ad-
6	ministrator, based on recommendations of the
7	Task Force, and in accordance with criteria de-
8	veloped by the Task Force under subparagraph
9	(C))—
10	"(i) assess the compliance by vessels
11	with regulations promulgated under this
12	section;
13	"(ii) assess the effectiveness of the
14	regulations referred to in clause (i) in re-
15	ducing the introduction and spread of
16	aquatic invasive species by vessels; and
17	"(iii) as necessary, on the basis of the
18	best scientific information available—
19	"(I) revise the regulations re-
20	ferred to in clause (i); and
21	"(II) promulgate additional regu-
22	lations.
23	"(B) Special review and revision.—
24	Not later than 90 days after the date on which
25	the Task Force makes a request to the Sec-

1	retary for a special review and revision, the Sec-
2	retary shall (with the concurrence of the Ad-
3	ministrator)—
4	"(i) conduct a special review of regu-
5	lations in accordance with subparagraph
6	(A); and
7	"(ii) as necessary, in the same man-
8	ner as provided under subparagraph
9	(A)(iv)—
10	"(I) revise those guidelines; or
11	"(II) promulgate additional regu-
12	lations.
13	"(C) Criteria for effectiveness.—Not
14	later than 1 year after the date of enactment of
15	the National Aquatic Invasive Species Act of
16	2002, and every 3 years thereafter, the Task
17	Force shall submit to the Secretary criteria for
18	determining the adequacy and effectiveness of
19	all regulations promulgated under this section.
20	"(2) International regulations.—
21	"(A) IN GENERAL.—The Secretary shall
22	revise regulations promulgated under this sub-
23	section as necessary to ensure that the regula-
24	tions relating to any matter are consistent with
25	the treatment of the matter in any international

1	agreement to which the United States is a
2	party that governs management of the transfer
3	by vessel of aquatic nonindigenous species.
4	"(B) Limitation.—The revisions carried
5	out pursuant to subparagraph (A) shall not
6	lessen the protectiveness of the overall program
7	established under this Act.";
8	(6) in subsection (h) (as redesignated by para-
9	graph (4))—
10	(A) in the first sentence of paragraph (1),
11	by striking "\$25,000" and inserting "\$50,000";
12	and
13	(B) in paragraph (4)(B), by inserting
14	", contingency requirements under subsection
15	(k)," after "recordkeeping";
16	(7) by striking subsection (k) and inserting the
17	following:
18	"(k) Safety Exemption.—
19	"(1) Master discretion.—The Master of a
20	vessel is not required to conduct a ballast water ex-
21	change if the Master determines that the exchange
22	would threaten the safety or stability of the vessel,
23	or the crew or passengers of the vessel, because of
24	adverse weather, vessel architectural design, equip-
25	ment failure, or any other extraordinary conditions.

1 "(2) OTHER REQUIREMENTS.—A vessel that 2 does not exchange ballast water on the high seas 3 under paragraph (1) shall not discharge ballast water in any harbor, except in accordance with a 5 contingency strategy approved by the Secretary (and 6 included in the invasive species management plan of 7 the vessel) to reduce the risk of organism transfer 8 by the discharge (using the best practicable tech-9 nology pursuant to regulations promulgated under 10 subsection (e)(1)(B)(iii))."; and 11 (8) by adding at the end the following: 12 "(m) Applicability; Effect on Other Law.— 13 Nothing in this section or any regulation promulgated under this section supersedes or otherwise affects any re-14 15 quirement or prohibition relating to the discharge of ballast water under the Federal Water Pollution Control Act 16 17 (33 U.S.C. 1251 et seq.). 18 "(n) Continuity of Regulations and Great Lakes Program.— 19 20 "(1) REGULATIONS.—Until such time as regu-21 lations are promulgated to implement the amend-22 ments made by the National Aquatic Invasive Spe-23 cies Act of 2002, regulations shall remain in effect

as of the date of enactment of that Act.

1	"(2) Great lakes program.—On implemen-
2	tation of a national mandatory ballast management
3	program that is at least as comprehensive as the
4	Great Lakes program (as determined by the Sec-
5	retary, in consultation with the Governors of Great
6	Lakes States)—
7	"(A) the program regulating vessels and
8	ballast water in Great Lakes under this section
9	shall terminate; and
10	"(B) the national program shall apply to
11	such vessels and ballast water.".
12	(b) Armed Services Whole Vessel Management
13	Program.—Section 1103 of the Nonindigenous Aquatic
14	Nuisance Prevention and Control Act of 1990 (16 U.S.C.
15	4713) is amended—
16	(1) by striking the section heading and insert-
17	ing the following:
18	"SEC. 1103. ARMED SERVICES WHOLE VESSEL MANAGE-
19	MENT PROGRAM.";
20	and
21	(2) in subsection (a)—
22	(A) by striking "Subject to" and inserting
23	the following:
24	"(1) Ballast water.—Subject to"; and
25	(B) by adding at the end the following:

- 1 "(2)TOWED VESSEL MANAGEMENT PRO-2 GRAM.—Subject to operational conditions, the Sec-3 retary of Defense, in consultation with the Sec-4 retary, the Task Force, and the International Mari-5 time Organization, shall implement a towed vessel 6 management program for Department of Defense 7 vessels to minimize the risk of introductions of 8 aquatic invasive species through hull and associated 9 hull aperture transfers by towed vessels.
 - "(3) Reports.—Not later than 3 years after the date of enactment of the National Aquatic Invasive Species Act of 2002, and every 3 years thereafter, the Secretary of Defense shall submit to Congress a report that includes a summary and analysis of the program carried out under paragraph (2).".

(c) Conforming Amendments.—

- (1) Section 1101(g) of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4711(g)) is amended by striking "under subsection (b) of (f)" each place it appears and inserting "under this section".
- (2) Section 1102(c)(1) of the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4712(c)(1)) is amended by striking

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- 1 "issued under section 1101(b)" and inserting "pro-
- 2 mulgated under section 1101(b)".
- 3 (3) Section 1102(f)(1)(B) of the Nonindigenous
- 4 Aquatic Nuisance Prevention and Control Act of
- 5 1990 (16 U.S.C. 4712(f)(1)(B)) is amended by
- 6 striking "guidelines issued pursuant to section
- 7 1101(c)" and inserting "regulations promulgated
- 8 under section 1101(c)".
- 9 SEC. 105. PREVENTION OF THE INTRODUCTION OF AQUAT-
- 10 IC INVASIVE SPECIES INTO WATERS OF THE
- 11 UNITED STATES BY OTHER PATHWAYS.
- 12 (a) Priority Pathway Management Program.—
- 13 Subtitle C of title I of the Nonindigenous Aquatic Nui-
- 14 sance Prevention and Control Act of 1990 (16 U.S.C.
- 15 4721 et seq.) is amended by adding at the end the fol-
- 16 lowing:
- 17 "SEC. 1210. PRIORITY PATHWAY MANAGEMENT PROGRAM.
- 18 "(a) Identification of High Priority Path-
- 19 WAYS.—Not later than 18 months after the date of enact-
- 20 ment of the National Aquatic Invasive Species Act of
- 21 2002, and every 3 years thereafter, the Task Force, in
- 22 coordination with the Invasive Species Council and in con-
- 23 sultation with representatives of States, industry, and
- 24 other interested parties, shall, based on pathway surveys
- 25 conducted under title II and other available research relat-

ing to the rates of introductions in waters of the United 2 States— 3 "(1) publish for public review and comment a 4 system for identifying and evaluating the relative 5 risk of pathways of the introductions; 6 "(2) identify any pathways that, according to 7 that system, pose the highest risk for introductions, 8 both nationally and on a region-by-region basis; 9 "(3) develop recommendations for management 10 strategies for those high-risk pathways; and 11 "(4) include in the report to Congress required 12 under section 1201(f)(2)(B) a description of the 13 identifications. strategies, and recommendations 14 based on research collected under title II. 15 "(b) Management of High Priority Path-WAYS.—Not later than 3 years after the date of enactment of the National Aquatic Invasive Species Act of 2002, the 17 18 Task Force shall, to the maximum extent practicable, implement the strategies described in subsection (a)(3).". 19 20 (b) Screening Process for Planned Importa-21 TIONS OF LIVE AQUATIC ORGANISMS.—Subtitle B of the Nonindigenous Aquatic Nuisance Prevention and Control

Act of 1990 (16 U.S.C. 4711 et seq.) is amended by add-

24 ing at the end the following:

1	"SEC. 1105. SCREENING PROCESS FOR PLANNED IMPORTA-
2	TIONS OF LIVE AQUATIC ORGANISMS.
3	"(a) In General.—Not later than 30 months after
4	the date of enactment of the National Aquatic Invasive
5	Species Act of 2002, no live aquatic organism not in trade
6	shall be imported into the United States without screening
7	and approval in accordance with subsections (c) and (d).
8	"(b) Guidelines.—
9	"(1) In general.—Not later than 30 months
10	after the date of enactment of the National Aquatic
11	Invasive Species Act of 2002, in consultation with
12	regional panels convened under section 1203, States,
13	tribes, and other stakeholders, the Invasive Species
14	Council (in conjunction with the Task Force) shall
15	promulgate guidelines for screening proposed
16	planned importations of live aquatic organisms into
17	the United States that include—
18	"(A) guidelines for minimum information
19	requirements for determinations under sub-
20	section (e); and
21	"(B) guidelines for a simplified notification
22	procedure for any additional shipments of orga-
23	nisms that may occur after completion of an
24	initial screening process and determination
25	under subsection (c).

1	"(2) Purpose.—The purpose of the screening
2	process shall be to prevent the establishment of
3	aquatic invasive species in waters of the United
4	States and contiguous waters of Canada and Mexico.
5	"(3) Factors.—In developing guidelines under
6	this subsection and reviewing and revising the guide-
7	lines under subsection (i), the Invasive Species
8	Council and the Task Force shall consider—
9	"(A) the likelihood of the spread of orga-
10	nisms by human or natural means;
11	"(B) organisms that may occur in associa-
12	tion with the organism planned for importation;
13	"(C) regional differences; and
14	"(D) the model established under section
15	1108(b).
16	"(c) Categories.—The screening process shall re-
17	quire the identification (to at least the genus level) of live
18	aquatic organisms and shall designate—
19	"(1) species with high or moderate probability
20	of undesirable impacts to areas within the bound-
21	aries of the United States and contiguous areas of
22	neighboring countries, to which the organism is like-
23	ly to spread; and

1 "(2) species with insufficient information to de-2 termine the risk category based on guidelines issued 3 pursuant to section 1105(b)(1)(B).

"(d) EVALUATION.—

- "(1) IN GENERAL.—Not later than 180 days after the date of promulgation of guidelines under subsection (b), in consultation with regional panels convened under section 1203, States, tribes, and other stakeholders, a Federal agency with authority over an importation into the United States of a live organism not in trade (other than through this Act) shall screen the organism in accordance with guidelines promulgated under subsection (b).
- "(2) DELEGATION AND AUTHORITY.—If no agency has authority described in paragraph (1) or an agency delegates the screening to the Director under subsection (g), the Director shall screen the organisms in accordance with subsections (a) and (b).
- "(3) MULTIPLE JURISDICTION.—If more than 1 agency has jurisdiction over the importation of a live organism, the agencies shall conduct only 1 screening process in accordance with an agreement of the agencies, except that the Secretary of Agriculture

1	shall have sole responsibility for screening cultured
2	aquatic organisms.
3	"(e) Requirements.—A Federal agency of jurisdic-
4	tion, or the Director under subsection (a)(2), shall—
5	"(1) restrict or prohibit the importation into
6	the United States from outside the United States of
7	any species that is described in subsection (c)(1);
8	"(2) prohibit the importation of any species de-
9	scribed in subsection (c)(2), unless the importation
10	is for the sole purpose of research that is conducted
11	in accordance with section 1202(f)(2); and
12	"(3) make a determination under this sub-
13	section not later than 60 days after receiving a re-
14	quest for permission to import a live aquatic species.
15	"(f) Screening Requirements.—The Director
16	shall promulgate screening requirements consistent with
17	the guidelines promulgated under subsection (b) to evalu-
18	ate any planned live aquatic species importation (including
19	an importation carried out by a Federal agency) from out-
20	side the borders of the United States into waters of the
21	United States that is—
22	"(1) not otherwise subject to Federal authority
23	to permit the importation; or
24	"(2) delegated to the Director by another agen-
25	cy of jurisdiction under subsection (g).

- 1 "(g) DELEGATION TO DIRECTOR.—Any agency with
- 2 authority over the planned importation of a live aquatic
- 3 organism may delegate to the Director the screening proc-
- 4 ess carried out under this section.
- 5 "(h) CATALOG OF ORGANISMS IN TRADE.—Not later
- 6 than 1 year after the date of enactment of the National
- 7 Aquatic Invasive Species Act of 2002, the Director of the
- 8 United States Geological Survey and the Director of the
- 9 Smithsonian Environmental Research Center, in coopera-
- 10 tion with agencies with jurisdiction over planned importa-
- 11 tions of live organisms, shall—
- "(1) develop a catalog of organisms in trade;
- 13 and
- 14 "(2) include the list in the information provided
- to the public pursuant to section 1102(f).
- 16 "(i) Funds for State and Interstate Imple-
- 17 MENTATION OF SCREENING PROCESS.—Each States that
- 18 implements a screening process for movements of live or-
- 19 ganisms, into and within the State, that is consistent with
- 20 the Federal screening process established under this sec-
- 21 tion, as part of the State invasive species management
- 22 plan approved under section 1204(a), shall be eligible to
- 23 receive a grant under section 1204(b) for the implementa-
- 24 tion of the screening process.
- 25 "(j) REVIEW AND REVISION.—

- 1 "(1) In general.—At least once every 3 years, 2 the Council, in conjunction with the Task Force, 3 shall use research on early detection and monitoring under section 1106, among other information 5 sources, to review and revise to the screening, guide-6 lines, and process carried out under this section. 7 "(2) Report.—The Invasive Species Council 8 shall include in its report to Congress required pur-9 suant to section 1201(f)(2)(B)— "(A) an evaluation of the effectiveness of 10 11 the screening processes carried out under this 12 section; and 13 "(B) recommendations for revisions of the 14 processes. 15 "(k) Penalties.—Paragraphs (1) and (2) of section 1101(h) shall apply to a violation of this section. 16 17 "(1) FEES.—The head of any agency that has juris-18 diction over a planned importation of a live organism subject to screening under this Act may increase the amount 19 20 of any appropriate fee that is charged under an authority 21 of law to offset the cost of any screening process carried 22 out under this section.
- 23 "(m) Information.—A Federal agency conducting 24 a screening process under this section shall make the re-

1	sults of the process available to the public (including inter-
2	national organizations).".
3	SEC. 106. EARLY DETECTION AND MONITORING.
4	Subtitle B of the Nonindigenous Aquatic Nuisance
5	Prevention and Control Act of 1990 (16 U.S.C. 4711 et
6	seq.) (as amended by section 105(b)) is amended by add-
7	ing at the end the following:
8	"SEC. 1106. EARLY DETECTION AND MONITORING.
9	"(a) Early Detection.—
10	"(1) In general.—Not later than 18 months
11	after the date of enactment of the National Aquatic
12	Invasive Species Act of 2002, in conjunction with
13	the Council, the Task Force shall develop (based on
14	the standard protocol for early detection surveys de-
15	veloped under title II), publish for public comment,
16	and promulgate a set of sampling protocols, a geo-
17	graphic plan, and budget to support a national sys-
18	tem of ecological surveys to rapidly detect recently-
19	established aquatic invasive species in waters of the
20	United States.
21	"(2) Contents.—The protocols, plan, and
22	budget shall, at a minimum—
23	"(A) address a diversity of water bodies of
24	the United States (including inland and coastal
25	waters);

1	"(B) encourage State, local, port, and trib-
2	al participation in monitoring;
3	"(C) balance scientific rigor with practica-
4	bility, timeliness, and breadth of sampling activ-
5	ity;
6	"(D) provide for the identification of pos-
7	sible pathways causing or influencing distribu-
8	tion of newly-detected populations of harmful
9	aquatic organisms;
10	"(E) include a capacity to evaluate the im-
11	pacts of permitted importations screened by the
12	processes established under section 1105; and
13	"(F) include clear lines of communication
14	with appropriate Federal, State, and regional
15	rapid response authorities.
16	"(3) Implementation.—Not later than 2
17	years after the date of enactment of the National
18	Aquatic Invasive Species Act of 2002, the Director
19	of the United States Fish and Wildlife Service, the
20	Administrator of the National Oceanic and Atmos-
21	pheric Administration, and the Administrator (in
22	consultation with the Invasive Species Council and
23	in coordination with other agencies) shall implement
24	a national system of ecological surveys that is—

1	"(A) carried out in cooperation with State,
2	local, port, tribal authorities, and other non-
3	Federal entities (likes colleges and universities);
4	"(B) based on the protocols, plan, and
5	budget published under subsection (a)(1) and
6	any public comment.
7	"(b) List of Potential Invaders.—
8	"(1) In general.—Not later than 180 days
9	after the date of enactment of the National Aquatic
10	Invasive Species Act of 2002, and annually there-
11	after, the Task Force (building on prior efforts to
12	create lists, to the maximum extent practicable)
13	shall publish a list that identifies, based on research
14	(including research conducted under title II)—
15	"(A) aquatic invasive species not yet intro-
16	duced into waters of the United States that are
17	likely to be introduced into waters of the United
18	States unless preventative measures are taken;
19	and
20	"(B) the likely pathways for introduction
21	of the species and transfer of the species.
22	"(2) USE.—The Task Force shall use the list
23	to inform and make recommendations regarding en-
24	forcement, voluntary actions, early detection, moni-

1	toring, pathway management, rapid response plan-
2	ning, and screening efforts.
3	"(3) Public availability.—The Task Force
4	shall—
5	"(A) make the list available to the public
6	on the Internet pursuant to section
7	1202(h)(4)(D); and
8	"(B) in conjunction with the Invasive Spe-
9	cies Council, include the list in the report under
10	section $1201(f)(2)(B)$.
11	"(4) Exchange of information.—The Task
12	Force shall exchange information on invasive species
13	with interested agencies, States, Indian tribes, inter-
14	national organizations (such as the International
15	Council for the Exploration of the Sea), and other
16	stakeholder groups to assist in efforts to prevent and
17	detect introductions.".
18	SEC. 107. CONTAINMENT AND CONTROL.
19	(a) National Dispersal Barrier Program.—
20	(1) In general.—Section 1202 of the Non-
21	indigenous Aquatic Nuisance Prevention and Control
22	Act of 1990 (16 U.S.C. 4722) is amended—
23	(A) by redesignating subsections (j) and
24	(k) as subsections (l) and (m), respectively;

1	(B) by inserting after subsection (i) the
2	following:
3	"(j) National Dispersal Barrier Program.—
4	"(1) CHICAGO RIVER SHIP AND SANITARY
5	CANAL DISPERSAL BARRIER PROJECT.—
6	"(A) IN GENERAL.—The Assistant Sec-
7	retary, with the concurrence of the Adminis-
8	trator, shall complete construction of, and
9	maintain, the Chicago River Ship and Sanitary
10	Canal dispersal barrier project.
11	"(B) Consultation.—Subparagraph (A)
12	shall be carried out in consultation with—
13	"(i) the Task Force;
14	"(ii) the Great Lakes Aquatic Nui-
15	sance Species Panel;
16	"(iii) the Great Lakes Fishery Com-
17	mission;
18	"(iv) the Upper Mississippi River
19	Basin Association;
20	"(v) the Illinois Natural History Sur-
21	vey;
22	"(vi) the Mississippi Interstate Coop-
23	erative Resources Association;
24	"(vii) the city of Chicago;

1	"(viii) local water and power authori-
2	ties; and
3	"(ix) other appropriate entities.
4	"(C) Construction of Barrier.
5	"(i) In general.—Not later than 1
6	year after the date of enactment of the
7	National Aquatic Invasive Species Act of
8	2002, the Assistant Secretary, with the
9	concurrence of the Administrator, shall
10	complete construction of and maintain the
11	Chicago River Ship and Sanitary Canal
12	dispersal barrier project.
13	"(ii) Required elements of
14	PROJECT.—The completed project under
15	clause (i) shall include—
16	"(I) additions to the existing dis-
17	persal barrier, including—
18	"(aa) backup power;
19	"(bb) a research vessel
20	launching crane;
21	"(cc) replacement electrodes;
22	"(dd) other barrier ele-
23	ments, as available and appro-
24	priate;

1	"(ee) an acoustic monitoring
2	system; and
3	"(ff) emergency egress sys-
4	tem; and
5	"(II) construction of a second
6	long-service life dispersal barrier.
7	"(D) OPERATION OF BARRIER.—Not later
8	than 1 year after the date of enactment of the
9	National Aquatic Invasive Species Act of 2002,
10	the Assistant Secretary shall operate and main-
11	tain the Chicago River Ship and Sanitary Canal
12	dispersal barrier project.
13	"(E) Feasibility study of chicago
14	RIVER SHIP AND SANITARY CANAL.—
15	"(i) In general.—Not later than 3
16	years after the date of enactment of the
17	National Aquatic Invasive Species Act of
18	2002, the Assistant Secretary, in consulta-
19	tion with the entities specified in subpara-
20	graph (B), shall conduct a feasibility
21	study, incorporating information from the
22	interbasin transfer monitoring program
23	under paragraph (2)(C) and the dispersal
24	barrier research and development program
25	under section 1107(c), of the full range of

1	options available to prevent the spread of
2	aquatic invasive species through the Chi-
3	cago River Ship and Sanitary Canal dis-
4	persal barrier.
5	"(ii) Matters to be studied.—The
6	study shall —
7	"(I) provide recommendations
8	concerning additional measures nec-
9	essary to improve the performance of
10	the Chicago River Ship and Sanitary
11	Canal dispersal barrier; and
12	"(II) examine methods and meas-
13	ures necessary to achieve—
14	"(aa) to the maximum ex-
15	tent practicable, 100 percent effi-
16	cacy of the barrier with respect
17	to aquatic invasive species of
18	fish; and
19	"(bb) maximum efficacy of
20	the barrier with respect to other
21	taxa of aquatic invasive species;
22	and
23	"(III) examine additional long-
24	term measures, including structural
25	modifications, needed to prevent the

1	spread of aquatic invasive species
2	through the Chicago River Ship and
3	Sanitary Canal.
4	"(2) Monitoring Program.—
5	"(A) ESTABLISHMENT.—Not later than 1
6	year after the date of enactment of the Na-
7	tional Aquatic Invasive Species Act of 2002, the
8	Secretary of the Interior (acting through the
9	Director and in consultation with the Task
10	Force) shall establish a program to be known
11	as the 'interbasin and intrabasin transfer moni-
12	toring program' (referred to in this paragraph
13	as the 'monitoring program').
14	"(B) Required elements.—The moni-
15	toring program shall—
16	"(i) track aquatic invasive species
17	moving through—
18	"(I) the Chicago River Ship and
19	Sanitary Canal;
20	"(II) the Lake Champlain Canal;
21	"(III) other interbasin water-
22	ways; and
23	"(IV) major river systems, such
24	as the Mississippi River, as rec-

1	ommended by regional panels con-
2	vened under section 1203;
3	"(ii) assess the efficacy of dispersal
4	barriers and other measures in preventing
5	the spread of aquatic invasive species
6	through the waterways specified in clause
7	(i);
8	"(iii) identify waterways suitable for
9	dispersal barrier demonstration projects, in
10	addition to the waterways at which dis-
11	persal barrier demonstration projects were
12	carried out before the date of enactment of
13	the National Aquatic Invasive Species Act
14	of 2002;
15	"(iv) conduct a feasibility study of the
16	full range of options available to prevent
17	the spread of aquatic invasive species
18	through the Lake Champlain Canal;
19	"(v) build on and provide data to the
20	early detection and monitoring system es-
21	tablished pursuant to section 1106; and
22	"(vi) use information collected under
23	title II.
24	"(C) Reports.—

1	"(i) In general.—The Secretary of
2	Interior, acting through the Director, shall
3	make available to the public—
4	"(I) not later than 1 year after
5	the date of enactment of the National
6	Aquatic Invasive Species Act of 2002
7	and annually thereafter, a report that
8	contains the information described in
9	clauses (i) and (ii) of subparagraph
10	(B); and
11	"(II) not later than 2 years after
12	the date of enactment of the National
13	Aquatic Invasive Species Act of 2002
14	and biennially thereafter, a report
15	that contains the information de-
16	scribed in clauses (iii) and (iv) of sub-
17	paragraph (B).
18	"(ii) Report to congress.—Not
19	later than 3 years after the date of enact-
20	ment of the National Aquatic Invasive Spe-
21	cies Act of 2002, the Assistant Secretary
22	and the Director shall jointly submit to
23	Congress a report that describes—

1	"(I) the efficacy of the Chicago
2	River Ship and Sanitary Canal dis-
3	persal barrier project;
4	" (II) the results of the programs
5	conducted under paragraphs (2) and
6	(3); and
7	"(III) a plan to provide for addi-
8	tional dispersal barrier demonstration
9	projects and further research needs.
10	"(iii) Information.—The Invasive
11	Species Council, in conjunction with the
12	Task Force, shall include information de-
13	scribed in subparagraph (B) in the report
14	of the Task Force under section
15	1201(f)(2)(B).
16	"(3) Prevention and mitigation plans for
17	CORPS PROJECTS.—In developing projects involving
18	interbasin waterways or other hydrologic alterations
19	that could create pathways for aquatic invasive spe-
20	cies, the Assistant Secretary shall develop adequate
21	prevention and mitigation plans for controlling the
22	dispersal of aquatic invasive species.
23	"(4) TECHNICAL ASSISTANCE.—The Great
24	Lakes Environmental Research Laboratory of the
25	National Oceanic and Atmospheric Administration

1	shall provide technical assistance to appropriate enti-
2	ties to assist in the research conducted under this
3	subsection.".
4	(2) Conforming amendments.—
5	(A) Section 1202(i) of the Nonindigenous
6	Aquatic Nuisance Prevention and Control Act
7	of 1990 (16 U.S.C. 4722(i)) is amended—
8	(i) by striking the subsection heading
9	and inserting the following:
10	"(i) Invasive Species Demonstration Pro-
11	GRAM.—'';
12	(ii) by striking paragraph (3);
13	(iii) in paragraph (4), by striking
14	"studies under paragraphs (2) and (3)"
15	and inserting "study under paragraph
16	(2)"; and
17	(iv) by redesignating paragraphs (4)
18	and (5) as paragraphs (3) and (4), respec-
19	tively.
20	(B) Subsections $(a)(1)(B)$ and $(b)(2)$ of
21	section 1203 of the Nonindigenous Aquatic
22	Nuisance Prevention and Control Act of 1990
23	(16 U.S.C. 4723) are amended by striking "sec-
24	tion 1202(i) of this Act" each place it appears

1	and inserting "subsections (i) and (j) of section
2	1202".
3	(b) Improvement of Treatment Methods for
4	AQUATIC INVASIVE SPECIES.—Section 1202 of the Non-
5	indigenous Aquatic Nuisance Prevention and Control Act
6	of 1990 (16 U.S.C. 4722) (as amended by subsection
7	(a)(1)) is amended by inserting after subsection (j) the
8	following:
9	"(k) Improvement of Treatment Methods for
10	AQUATIC INVASIVE SPECIES.—
11	"(1) Criteria to evaluate environmental
12	SOUNDNESS OF TREATMENT METHODS.—
13	"(A) IN GENERAL.—Not later than 18
14	months after the date of enactment of the Na-
15	tional Aquatic Invasive Species Act of 2002, the
16	Administrator, in consultation and cooperation
17	with the Secretary, the Invasive Species Coun-
18	cil, and the Task Force (including any regional
19	panels of the Task Force) shall promulgate cri-
20	teria to evaluate the treatment methods de-
21	scribed in subparagraph (B) for the purpose of
22	ensuring that the treatment methods pose no
23	significant threat of adverse effect on human
24	health, public safety, or the environment (in-
25	cluding air quality and the aquatic environ-

1	ment) that is acute, chronic, cumulative, or col-
2	lective.
3	"(B) Treatment methods.—The treat-
4	ment methods referred to in subparagraph (A)
5	are all chemical, biological, and other treatment
6	methods used in bodies of water of the United
7	States (regardless of whether the bodies of
8	water are navigable and regardless of the origin
9	of the waters), to prevent, treat, or respond to
10	the introduction of aquatic invasive species.
11	"(C) Consultation.—In carrying out
12	subparagraph (A), the Administrator shall con-
13	sult with—
14	"(i) the Secretary of Transportation;
15	"(ii) the Task Force (including the re-
16	gional panels of the Task Force established
17	under section 1203);
18	"(iii) the Director;
19	"(iv) the Assistant Secretary;
20	"(v) the Director of the National Ma-
21	rine Fisheries Service; and
22	"(vi) relevant State agencies.
23	"(2) Publication of information on envi-
24	RONMENTALLY SOUND TREATMENT METHODS.—The
25	Administrator, in consultation with the Invasive Spe-

- 1 cies Council, shall publish (not later than 1 year 2 after the date of enactment of the National Aquatic Invasive Species Act of 2002) and update annu-3 4 ally— "(A) a list of environmentally sound treat-5 6 ment methods that may apply to a potential 7 aquatic invasive species response effort; "(B) accompanying research that supports 8 9 the environmental soundness of each approved 10 treatment method; and 11 "(C) explicit guidelines under which each 12 treatment method can be used in an environ-13 mentally sound manner. 14 "(3) Reports.—The Invasive Species Council 15 and Task Force shall include the information de-16 scribed in paragraph (2) in the reports submitted 17 under section 1201(f)(2)(B).". 18 (c) RAPID RESPONSE.—Subtitle C of title I of the 19 Nonindigenous Aquatic Nuisance Prevention and Control 20 Act of 1990 (16 U.S.C. 4721 et seq.) (as amended by sec-21 tion 103(a)) is amended by adding at the end the fol-22 lowing:
- 23 "SEC. 1211. RAPID RESPONSE.
- 24 "(a) State Rapid Response Contingency Strat-
- 25 EGIES.—

1	"(1) Emergency funds for rapid re-
2	SPONSE.—
3	"(A) In General.—A State that has in
4	effect a rapid response contingency strategy for
5	invasive species in the State that is approved
6	under paragraph (2) shall be eligible to receive
7	emergency funding for a period of 1 fiscal year
8	to implement rapid response measures for
9	aquatic invasive species under the strategy, sub-
10	ject to renewal, as determined by the Secretary
11	of the Interior and the Secretary in accordance
12	with paragraph (2).
13	"(B) FEDERAL ASSISTANCE.—If a Federal
14	agency carries out a rapid response measure
15	under subparagraph (A) on behalf of a State,
16	the Federal agency shall receive such emergency
17	funding as would have been awarded to the
18	State to carry out the rapid response measure.
19	"(2) Approval of Rapid Response Contin-
20	GENCY STRATEGIES.—The Task Force, in consulta-
21	tion with the Invasive Species Council, and, with re-
22	spect to any vessels involved, the Secretary, shall ap-

prove a State rapid response contingency strategy

described in subparagraph (A) if the strategy—

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1	"(A) identifies all key governmental and
2	nongovernmental partners to be involved in car-
3	rying out the strategy;
4	"(B) clearly designates the authorities and
5	responsibilities of each partner, including the
6	authority of any State or government of an In-
7	dian tribe to distribute emergency funds;
8	"(C) specifies criteria for rapid response
9	measures, including a diagnostic system that—
10	"(i) distinguishes cases in which rapid
11	response has a likelihood of success and
12	cases in which rapid response has no likeli-
13	hood of success;
14	"(ii) distinguishes rapid response
15	measures from ongoing management and
16	control of established populations of aquat-
17	ic invasive species; and
18	"(iii) distinguishes instances in which
19	the rate and probability of organism dis-
20	persal is significantly altered by vessel
21	movements;
22	"(D) includes an early detection strategy
23	that supports or complements the early detec-
24	tion and monitoring system developed under
25	section 1108;

1	"(E) provides for a monitoring capability
2	to assess—
3	"(i) the extent of infestations; and
4	"(ii) the effectiveness of rapid re-
5	sponse efforts;
6	"(F) to the maximum extent practicable, is
7	integrated into the State aquatic invasive spe-
8	cies management plan approved under section
9	1204;
10	"(G) does not use any rapid response tools
11	that do not meet environmental criteria devel-
12	oped under subsection (e)(4);
13	"(H) includes a public education and out-
14	reach component directed at—
15	"(i) potential pathways for spread of
16	aquatic invasive species; and
17	"(ii) persons involved in industries
18	and recreational activities associated with
19	those pathways; and
20	"(I) to the extent that the strategy involves
21	vessels, conforms with guidelines issued by the
22	Secretary under subsection $(e)(2)$.
23	"(b) REGIONAL RAPID RESPONSE CONTINGENCY
24	STRATEGIES.—The Task Force, with the concurrence of
25	the Invasive Species Council and in consultation with the

1	regional panels of the Task Force established under sec-
2	tion 1203, shall encourage the development of regional
3	rapid response contingency strategies that—
4	"(1) provide a consistent and coordinated ap-
5	proach to rapid response; and
6	"(2) are approved by—
7	"(A) the Secretary; and
8	"(B) the Governors and Indian tribes hav-
9	ing jurisdiction over areas within a region.
10	"(c) Model Rapid Response Contingency
11	STRATEGIES.—Not later than 18 months after the date
12	of enactment of the National Aquatic Invasive Species Act
13	of 2002—
14	"(1) the Task Force, with the concurrence of
15	the Invasive Species Council and the regional panels
16	of the Task Force established under section 1203,
17	shall develop—
18	"(A) a model State rapid response contin-
19	gency strategy for aquatic invasive species; and
20	"(B) a model regional rapid response con-
21	tingency strategy for aquatic invasive species;
22	and
23	"(2) the Secretary shall issue guidelines for the
24	inclusion of vessel-related requirements into a rapid
25	response contingency strategy, including specific re-

- quirements for strategy provisions that may be approved under subsection (a)(2)(J).
- 3 "(d) Cost Sharing.—

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- "(1) STATE RAPID RESPONSE CONTINGENCY
 STRATEGIES.—The Federal share of the cost of activities carried out under a State rapid response contingency strategy approved under subsection (a)
 shall be 50 percent.
 - "(2) REGIONAL RAPID RESPONSE CONTINGENCY STRATEGIES.—The Federal share of the cost of activities carried out under a regional rapid response contingency strategy approved under subsection (b) shall be 75 percent.
 - "(e) Federal Rapid Response Teams.—
- 15 "(1) Establishment of teams.—Not later 16 than 1 year after the date of enactment of the Na-17 tional Aquatic Invasive Species Act of 2002, the 18 Invasive Species Council, in coordination with the 19 Task Force and the heads of appropriate Federal 20 agencies, shall establish a Federal rapid response 21 team for each of the 10 Federal regions that com-22 prise the Standard Federal Regional Boundary Sys-23 tem.
- 24 "(2) DUTIES OF TEAMS.—Each Federal rapid 25 response team shall, at a minimum—

1	"(A) implement rapid eradication or con-
2	trol responses for newly detected aquatic
3	invasive species on Federal and tribal land;
4	"(B) carry out, or assist in carrying out,
5	rapid responses for newly detected aquatic
6	invasive species on non-Federal land at the re-
7	quest of a State, Indian tribe, or group of
8	States or Indian tribes, with a rapid response
9	contingency strategy approved under subsection
10	(a) or (b);
11	"(C) provide training and expertise for
12	State, tribal, or regional rapid responders;
13	"(D) provide central sources of informa-
14	tion for rapid responders;
15	"(E) maintain a list of researchers and
16	rapid response volunteers; and
17	"(F) in carrying out any rapid response
18	activity with respect to an aquatic noxious weed
19	listed under section 412(f) of the Plant Protec-
20	tion Act (7 U.S.C. 7712(f)), include representa-
21	tives of the Animal and Plant Health Inspection
22	Service.
23	"(3) Criteria for identifying cases of
24	RAPID RESPONSE WARRANTING FEDERAL ASSIST-
25	ANCE.—Not later than 1 year after the date of en-

1	actment of the National Aquatic Invasive Species
2	Act of 2002, the Task Force, with the concurrence
3	of the Invasive Species Council, shall develop criteria
4	to identify cases of rapid response warranting Fed-
5	eral assistance under this subsection, including cri-
6	teria relating to, at a minimum—
7	"(A) the extent to which infestations of
8	aquatic invasive species may be managed suc-
9	cessfully by rapid response;
10	"(B) the extent to which rapid response ef-
11	forts may differ from ongoing management and
12	control; and
13	"(C) the extent to which infestations of
14	nonindigenous aquatic invasive species are con-
15	sidered to be an acute or chronic threat to—
16	"(i) biodiversity of native fish and
17	wildlife;
18	"(ii) habitats of native fish and wild-
19	life; or
20	"(iii) human health.
21	"(4) Environmental criteria.—Not later
22	than 1 year after the date of enactment of the Na-
23	tional Aquatic Invasive Species Act of 2002, the Ad-
24	ministrator, in consultation with the Invasive Spe-
25	cies Council, the Secretary of Transportation, the

1	Task Force (including regional panels of the Task
2	Force established under section 1203), the Director
3	and the Director of the National Marine Fisheries
4	Service, shall develop environmental criteria to mini-
5	mize nontarget environmental impacts of rapid re-
6	sponses carried out pursuant to this section.
7	"(f) National Nutria Control Program.—
8	"(1) In general.—Not later than 180 days
9	after the date of enactment of the National Aquatic
10	Invasive Species Act of 2002, the Task Force shall
11	establish a national subcommittee on nutria com-
12	posed of representatives of—
13	"(A) the United States Fish and Wildlife
14	Service;
15	"(B) the United States Geological Survey
16	"(C) State fish and wildlife agencies in
17	States affected by nutria; and
18	"(D) nonprofit and commercial interests in
19	nutria and the impact of nutria on native habi-
20	tat and species.
21	"(2) Proposal for nutria control.—Not
22	later than 1 year after the date of enactment of the
23	National Aquatic Invasive Species Act of 2002, the
24	subcommittee shall—

1	"(A) report to the Task Force on actions
2	taken to carry out this subsection;
3	"(B) draft a proposal for—
4	"(i) nutria control guidelines; and
5	"(ii) support, criteria, and processes
6	for grants to promote State and regional
7	partnership efforts to control nutria in ac-
8	cordance with the guidelines; and
9	"(C) submit the proposal to the Task
10	Force for approval, including a recommendation
11	to the Task Force on national priority tasks
12	and resources required to carry out the pro-
13	posal.
14	"(3) Other duties.—In addition to the re-
15	sponsibilities described in paragraph (2), the sub-
16	committee shall—
17	"(A) oversee and coordinate implementa-
18	tion of approved national priority tasks relating
19	to nutria control;
20	"(B) review State and regional partnership
21	grant proposals and make recommendations to
22	the Task Force on making grants to carry out
23	the proposals; and

1	"(C) carry out additional duties assigned
2	to the subcommittee by the Task Force (includ-
3	ing a co-chairperson of the Task Force).".
4	SEC. 108. BROWN TREE SNAKE CONTROL PROGRAM.
5	Section 1209 of the Nonindigenous Aquatic Nuisance
6	Prevention and Control Act of 1990 (16 U.S.C. 4728) is
7	amended to read as follows:
8	"SEC. 1209. BROWN TREE SNAKE CONTROL PROGRAM.
9	"(a) In General.—The Task Force and the
10	Invasive Species Council shall support the continuation
11	and expansion of a regionally-based comprehensive, envi-
12	ronmentally sound program, conducted in coordination
13	with territories and possessions of the United States,
14	States, and political subdivisions, to control the brown tree
15	snake on Guam, the Commonwealth of the Northern Mar-
16	iana Islands, the State of Hawaii, and other areas in
17	which the brown tree snake is, or may become, established
18	outside of the historic range of the brown tree snake.
19	"(b) Components.—The program shall include—
20	"(1) the expansion of Federal and territorial
21	control programs on Guam that reduce the undesir-
22	able impact of the brown tree snake on Guam and
23	reduce the risk of spread to areas in which the snake
24	is not established:

1	"(2) the expansion of existing control programs
2	in the Commonwealth of the Northern Mariana Is-
3	lands and the State of Hawaii, including the estab-
4	lishment of interagency rapid response teams to as-
5	sist local governments with detecting brown tree
6	snakes and incipient brown tree snake populations in
7	areas in which brown tree snakes are not estab-
8	lished;
9	"(3) product-oriented research based on control
10	program needs, including projects to reduce the
11	number of brown tree snakes on Guam and an anal-
12	ysis of pathways for brown tree snake introduction
13	into areas in which the species is not established;
14	"(4) the appointment of a coordinator by the
15	Invasive Species Council to provide oversight and di-
16	rection over Federal actions dealing with brown tree
17	snake control; and
18	"(5) the continuation of the Brown Tree Snake
19	Control Committee, which shall—
20	"(A) be chaired by the coordinator; and
21	"(B) meet annually to plan and coordinate
22	ongoing brown tree snake control activities or
23	a regional and national level.".

SEC. 109. INFORMATION, EDUCATION, AND OUTREACH. 2 Section 1202(h) of the Nonindigenous Aquatic Nui-3 sance Prevention and Control Act of 1990 (16 U.S.C. 4 4722(h)) is amended— (1) by striking "(h) EDUCATION.—The Task 5 6 Force" and inserting the following: 7 "(h) Information, Education, and Outreach.— "(1) IN GENERAL.—The Task Force"; and 8 9 (2) by adding at the end the following: "(2) Activities.— 10 "(A) IN GENERAL.—The programs carried 11 out under paragraph (1) shall include the ac-12 13 tivities described in this paragraph. "(B) Public outreach.— 14 15 "(i) Public Warnings.—Not later 16 than 180 days after the date of enactment of the National Aquatic Invasive Species 17 18 Act of 2002, each Federal officer of an 19 agency that provides Federal funds to 20 States for building or maintaining public 21 access points to United States water bodies 22 shall amend the guidelines of the agency, 23 in consultation with relevant State agen-24 cies, to encourage the posting of regionally-25 specific public warnings or other suitable

1	informational and educational materials at
2	the access points regarding—
3	"(I) the danger of spread of
4	aquatic invasive species through the
5	transport of recreational watercraft;
6	and
7	"(II) methods for removing orga-
8	nisms prior to transporting a
9	watercraft.
10	"(ii) Cleaning of Watercraft at
11	MARINAS.—Not later than 1 year after the
12	date of enactment of the National Aquatic
13	Invasive Species Act of 2002, the Under
14	Secretary (in consultation with the States,
15	relevant industry groups, and Indian
16	tribes) shall develop a concerted education,
17	outreach, and training program directed
18	toward marinas and marina operators re-
19	garding—
20	"(I) checking watercraft for live
21	organisms;
22	"(II) removing live organisms
23	from the watercraft before the
24	watercraft are commercially or
25	recreationally trailered;

1	"(III) encouraging regular hull
2	cleaning and maintenance, avoiding
3	in-water hull cleaning; and
4	"(IV) other activities, as identi-
5	fied by the Secretary.
6	"(iii) Proper disposal of non-
7	NATIVE LIVE AQUATIC ORGANISMS IN
8	TRADE.—The Task Force shall—
9	"(I) not later than 1 year after
10	the date of enactment of the National
11	Aquatic Invasive Species Act of 2002,
12	develop (in consultation with industry
13	and other affected parties) guidelines
14	for proper disposal of live nonnative
15	aquatic organisms in trade; and
16	"(II) use the guidelines in appro-
17	priate public information and out-
18	reach efforts.
19	"(C) 100th meridian program.—
20	"(i) IN GENERAL.—Not later than 1
21	year after the date of enactment of the
22	National Aquatic Invasive Species Act of
23	2002, the Task Force shall develop an in-
24	formation and education program directed
25	at recreational boaters in States from

1	which watercraft are transported westward
2	across the 100th meridian.
3	"(ii) Activities.—In carrying out the
4	program, the task force shall—
5	"(I) survey owners of watercraft
6	transported westward across the
7	100th meridian to determine the
8	States of origin of most such owners;
9	"(II) provide information directly
10	to watercraft owners concerning the
11	importance of cleaning watercraft car-
12	rying live organisms before trans-
13	porting the watercraft; and
14	"(III) support education and in-
15	formation programs of the States of
16	origin to ensure that the State pro-
17	grams address westward spread.
18	"(D) Information and education pro-
19	GRAM BY NATIONAL PARK SERVICE.—The Sec-
20	retary of the Interior, acting through the Direc-
21	tor of the National Park Service, shall develop
22	a program to provide public outreach and other
23	educational activities to prevent the spread of
24	aquatic invasive species by recreational
25	watercraft in parkland or through events spon-

1	sored by the National Park Service, including
2	the Lewis and Clark Bicentennial Expedition.
3	"(3) Outreach to industry.—The Task
4	Force, in conjunction with the Invasive Species
5	Council, shall carry out activities to inform and pro-
6	mote voluntary cooperation and regulatory compli-
7	ance by members of the national and international
8	maritime, horticultural, aquarium, aquaculture, and
9	pet trade industries with screening, monitoring, and
10	control of the transportation of aquatic invasive spe-
11	cies.
12	"(4) Public access to monitoring informa-
13	TION.—The Task Force, in consultation with the
14	Smithsonian Environmental Research Center, the
15	Invasive Species Council, and other agencies, shall
16	maintain information on the Internet regarding—
17	"(A) the best approaches for the public
18	and private interests to use in assisting with
19	national early detection and monitoring of
20	aquatic invasive species in waters of the United
21	States;
22	"(B) contact locations for joining a na-
23	tional network of monitoring stations;
24	"(C) approved State Management Plans
25	under section 1204(a) and Rapid Response

1	Contingency Strategies under sections
2	1211(a)(2) and $1211(c)$; and
3	"(D) the list of potential invaders under
4	section 1106(c).".
5	TITLE II—AQUATIC INVASIVE
6	SPECIES RESEARCH
7	SEC. 201. ECOLOGICAL, PATHWAY, AND EXPERIMENTAL RE-
8	SEARCH.
9	(a) In General.—Subtitle B of the Nonindigenous
10	Aquatic Nuisance Prevention and Control Act of 1990 (16
11	U.S.C. 4711 et seq.) (as amended by section 106) is
12	amended by adding at the end the following:
13	"SEC. 1107. ECOLOGICAL, PATHWAY, AND EXPERIMENTAL
14	RESEARCH.
15	"(a) Definition of Administering Agencies.—
16	"(1) IN GENERAL.—In this section and section
17	1108, the term 'administering agencies' means—
18	"(A) the Smithsonian Environmental Re-
19	search Center;
20	"(B) the United States Geological Survey;
21	and
22	"(C) the National Oceanic and Atmos-
23	pheric Administration (including the Great
24	Lakes Environmental Research Laboratory).

1	"(2) Consultation.—In carrying out this sec-
2	tion, the administering agencies shall consult with—
3	"(A) the Task Force; and
4	"(B) Federal and State agencies.
5	"(3) Cooperation.—In carrying out this sec-
6	tion, the administering agencies shall contract or
7	otherwise cooperate with academic researchers.
8	"(b) Program.—The administering agencies shall
9	develop (not later than 1 year after the date of enactment
10	of the National Aquatic Invasive Species Act of 2002) and
11	conduct a marine and freshwater research program (in-
12	cluding ecological and pathway surveys and experimen-
13	tation) to assess rates of, patterns of, and conditions sur-
14	rounding introductions of nonnative aquatic species in
15	aquatic ecosystems.
16	"(c) Purpose.—The purpose of the program is to
17	support efforts to prevent the introduction of, and detect
18	and eradicate, invasive species by—
19	"(1) providing information for—
20	"(A) early detection and rapid response ef-
21	forts; and
22	"(B) relevant policy questions; and
23	"(2) assessing the effectiveness of relevant pro-
24	grams and activities to rank pathways by risk and

1	inform, review, and revise processes carried out
2	under this Act.
3	"(d) Protocol Development.—The administering
4	agencies shall—
5	"(1) propose standardized protocols for con-
6	ducting surveys (including surveys required under
7	paragraph (1)), including—
8	"(A) protocols to support early detection
9	surveys of nonnative aquatic species conducted
10	by Federal, State, or local agencies involved in
11	the management of invasive species, including
12	surveys carried out pursuant to section 1106;
13	"(B) protocols to support comprehensive
14	ecological surveys conducted under this section
15	for purposes of research and analysis of rates
16	and patters of invasions; and
17	"(C) protocols to support pathway surveys
18	for purposes of risk evaluation under this Act;
19	"(2) recommend a standardized approach for
20	classifying species;
21	"(3) consider recommendations made at the
22	workshop conducted under subsection (g);
23	"(4) subject protocols to peer review;

1	"(5) complete protocols not later than 9 months
2	after the date of enactment of the National Aquatic
3	Invasive Species Act of 2002; and
4	"(6) disseminate the protocols to the Task
5	Force and other Federal, State, and local stake-
6	holders.
7	"(e) Ecological and Pathway Survey Require-
8	MENTS.—
9	"(1) In general.—Each comprehensive eco-
10	logical survey conducted under this section shall, at
11	a minimum—
12	"(A) document baseline ecological informa-
13	tion of the aquatic ecosystem, including, to the
14	maximum extent practicable—
15	"(i) a comprehensive inventory of na-
16	tive species, nonnative species, and species
17	of unknown origin, present in the eco-
18	system; and
19	"(ii) the chemical and physical charac-
20	teristics of water and underlying substrate
21	in the ecosystem;
22	"(B) in the case of nonnative species, iden-
23	tify—
24	"(i) the life history of the species;

1	"(ii) the environmental requirements
2	and tolerances of the species;
3	"(iii) the native ecosystems of the spe-
4	cies; and
5	"(iv) the history of the species spread
6	from the native ecosystems of the species;
7	"(C) track the establishment of nonnative
8	species, including, to the maximum extent prac-
9	ticable, information about the estimated popu-
10	lation of nonnative organisms to allow an anal-
11	ysis of the probable date of introduction of the
12	species; and
13	"(D) identify, to the maximum extent
14	practicable, the likely pathway of entry of non-
15	native species.
16	"(2) MINIMUM REQUIREMENTS.—Each pathway
17	survey conducted under this section shall, at a min-
18	imum—
19	"(A) identify which nonnative aquatic taxa
20	are being introduced, or have the potential to be
21	introduced, through the pathways under consid-
22	eration;
23	"(B) determine the rate of organism intro-
24	duction through the pathways under consider-
25	ation; and

1	"(C) determine the practices that contrib-
2	uted to or could contribute to the introduction
3	of nonnative aquatic species through the path-
4	ways under consideration.
5	"(f) Number and Location of Survey Sites.—
6	"(1) Required sites.—
7	"(A) IN GENERAL.—The administering
8	agencies shall designate the number and loca-
9	tion of survey sites necessary to carry out ma-
10	rine and freshwater research required under
11	this section.
12	"(B) Administration.—In carrying out
13	this paragraph, the administering agencies shall
14	contract with academic institutions, as appro-
15	priate, through a competitive, peer-reviewed
16	process.
17	"(2) Emphasis.—In establishing sites under
18	paragraph (1)(A), the Smithsonian Environmental
19	Research Center and the United States Geological
20	Survey shall give particular consideration to—
21	"(A) the quality of the proposal;
22	"(B) the geographic diversity of sites; and
23	"(C) the diversity of human uses and bio-
24	logical characteristics of sites.

1	"(g) Workshop.—Not later than 120 days after the
2	date of enactment of the National Aquatic Invasive Spe-
3	cies Act of 2002, to assist in the development of the proto-
4	cols and design for the surveys under this section, the
5	Task Force shall—
6	"(1) convene a workshop among researchers
7	from Federal and State agencies and academic insti-
8	tutions to obtain recommendations for the develop-
9	ment of the protocols and surveys; and
10	"(2) make the results of the workshop widely
11	available to the public.
12	"(h) Experimentation.—The administering agen-
13	cies shall conduct (at existing field stations and such other
14	sites as may be appropriate) coordinated experiments on
15	a range of taxonomic groups to identify—
16	"(1) the relationship between the introduction
17	and establishment of nonnative aquatic species; and
18	"(2) the circumstances necessary for the species
19	to survive and thrive.
20	"(i) National Pathways and Ecological Sur-
21	VEYS DATABASE.—
22	"(1) In General.—The Secretary shall de-
23	velop, maintain, and update, in consultation and co-
24	operation with the administering agencies, a central
25	national database of information concerning

1	"(A) ballast water management and deliv-
2	ery practices for vessels entering United States
3	ports using information collected under section
4	1101(a)(2);
5	"(B) ballast water treatment methods
6	under use and development under section
7	1101(e); and
8	"(C) information collected under section
9	1104(b).
10	"(2) Administration.—The Secretary shall—
11	"(A) make the database widely available to
12	the public; and
13	"(B) update the database not less often
14	than once a year.
15	"(3) Report.—In consultation and cooperation
16	with the administering agencies, the Secretary shall
17	prepare and submit to Congress and the Task
18	Force, on a biennial basis, a report that synthesizes
19	and analyzes the information described in this sec-
20	tion relating to—
21	"(A) ballast water delivery and manage-
22	ment patterns; and
23	"(B) compliance by vessels with this sec-
24	tion (including regulations promulgated under
25	this section).".

1	(b) Vessel Pathway Surveys.—Section
2	1102(b)(2)(B) of Nonindigenous Aquatic Nuisance Pre-
3	vention and Control Act of 1990 (16 U.S.C.
4	4712(b)(2)(B)) is amended by striking clause (ii) and in-
5	serting the following:
6	"(ii) examine other potential modes
7	for the introduction of nonnative aquatic
8	species by vessel, including hull fouling.".
9	SEC. 202. ANALYSIS.
10	(a) In General.—Subtitle B of the Nonindigenous
11	Aquatic Nuisance Prevention and Control Act of 1990 (16
12	U.S.C. 4711 et seq.) (as amended by section 201(a)) is
13	amended by adding at the end the following:
14	"SEC. 1108. ANALYSIS.
15	"(a) Invasion Analysis.—
16	"(1) In general.—Not later than 3 years
17	after the date of enactment of the National Aquatic
18	Invasive Species Act of 2002, and annually there-
19	after, the administering agencies shall analyze data
20	collected under section 1107 for the purpose of pre-
21	venting the introduction of, detecting, and eradi-
22	cating invasive species by—
23	"(A) providing information for early detec-
24	tion and rapid response efforts;

1	"(B) providing information for relevant
2	policy questions; and
3	"(C) assessing the effectiveness of imple-
4	mented policies to prevent the introduction and
5	spread of invasive species.
6	"(2) Contents.—In preparing the analysis of
7	pathways used by aquatic invasive species under
8	paragraph (1)(A), the administering agencies shall—
9	"(A) identify, and characterize as high-,
10	medium-, or low-risk, regional and national
11	pathways for the introduction of nonnative
12	aquatic species into aquatic ecosystems;
13	"(B)(i) identify new and expanding path-
14	ways through which nonnative aquatic species
15	may be introduced into aquatic ecosystems; and
16	"(ii) consult with relevant Federal agencies
17	with jurisdiction over foreign commerce to iden-
18	tify any potential new or expanding pathways;
19	"(C) identify handling practices that con-
20	tribute to the introduction of species in path-
21	ways;
22	"(D) assess the risk that species currently
23	used in commerce pose for introduction into
24	aquatic ecosystems:

1	"(E) include patterns and rates of invasion
2	and susceptibility to invasion of various types of
3	bodies of water;
4	"(F) consider the ways in which the risk of
5	establishment of an aquatic invasive species
6	through a pathway is related to the identity and
7	number of organisms transported;
8	"(G) consider rates of spread and numbers
9	and types of pathways of spread of new popu-
10	lations of the aquatic invasive species;
11	"(H) document factors that influence the
12	vulnerability of an ecosystem to invasion by a
13	nonnative aquatic species;
14	"(I) include a description of the potential
15	for, and impacts of, pathway management pro-
16	grams on invasion rates;
17	"(J) provide recommendations for improve-
18	ments on the effectiveness of pathway manage-
19	ment;
20	"(K) to the maximum extent practicable,
21	determine the level of reduction in live orga-
22	nisms of various taxonomic groups required to
23	reduce to an acceptable level the risk of estab-
24	lishment to receiving aquatic ecosystems; and

1	"(L) evaluate the effectiveness of a stand-
2	ard at reducing species introductions and estab-
3	lishment.
4	"(3) Report.—The administering agencies
5	shall submit to the Task Force a report on analyses
6	conducted under this section.
7	"(b) Research To Assess the Potential of the
8	ESTABLISHMENT OF INTRODUCED SPECIES.—
9	"(1) In general.—Not later than 2 years
10	after the date of enactment of the National Aquatic
11	Invasive Species Act of 2002, the administering
12	agencies shall develop and submit to the Task Force
13	a profile of the general characteristics of invasive
14	species, in order to—
15	"(A) predict, to the maximum extent prac-
16	ticable, whether a species planned for importa-
17	tion is likely to invade a particular aquatic eco-
18	system if introduced; and
19	"(B) support the development of the
20	screening process authorized under section
21	1105.
22	"(2) Research.—In developing the profile, the
23	administering agencies shall analyze the research
24	conducted under section 1107 and other research as
25	necessary to determine—

1	"(A) characteristics of general species and
2	ecosystems (taking into account the opportunity
3	for introduction into any ecosystem); and
4	"(B) circumstances that may lead to estab-
5	lishment of a nonnative aquatic organism.
6	"(3) RECOMMENDATIONS.—The administering
7	agencies shall develop and submit to the Task Force,
8	for inclusion in the report to Congress developed
9	under section 1201(f)(2)(B), recommendations re-
10	garding organism characteristics warranting restric-
11	tion under section 1105.
12	"SEC. 1109. DISSEMINATION.
13	"(a) In General.—The Invasive Species Council, in
14	coordination with the Task Force, the United States Geo-
15	logical Survey, and the Smithsonian Environmental Re-
16	search Center, shall disseminate the information collected
17	under this Act to Federal, State, and local entities (includ-
18	ing relevant policymakers and private researchers with re-
19	sponsibility over or interest in aquatic invasive species).
20	"(b) Response Strategy.—To enable Federal,
21	State, and local entities having responsibility for respond-
22	ing to the introduction of potentially harmful nonnative
23	aquatic species to better and more rapidly respond to
24	those introductions, the Invasive Species Council, in co-
25	ordination with the Task Force and other appropriate

- 1 Federal and State agencies, shall implement a national
- 2 strategy for the sharing of information collected under this
- 3 Act with those entities.
- 4 "(c) Pathway Practices.—The Invasive Species
- 5 Council, in coordination with the Task Force, shall dis-
- 6 seminate information to, and develop an ongoing edu-
- 7 cational program for, pathway users (including vendors
- 8 and customers) to inform those users about means by
- 9 which users can prevent the intentional or unintentional
- 10 introduction of nonnative aquatic species into aquatic eco-
- 11 systems.
- 12 "SEC. 1110. TECHNOLOGY DEVELOPMENT AND DEM-
- 13 **ONSTRATION.**
- 14 "(a) Environmental Soundness Screening and
- 15 Improvement.—Not later than 1 year after the date of
- 16 enactment of the National Aquatic Invasive Species Act
- 17 of 2002, the Administrator and the Assistant Secretary
- 18 (in consultation with the Director, the National Marine
- 19 Fisheries Service, and other interested parties) shall es-
- 20 tablish a marine and freshwater research, development,
- 21 and demonstration program for more comprehensive and
- 22 environmentally sound methods and treatment tools for
- 23 use in preventing, controlling, and eradicating aquatic
- 24 invasive species, with an emphasis on technology needs

1	other than needs addressed under the program established
2	under section 1104(b).
3	"(b) Dispersal Barrier Research Program.—
4	"(1) Establishment.—Not later than 1 year
5	after the date of enactment of the National Aquatic
6	Invasive Species Act of 2002, the Assistant Sec-
7	retary, in conjunction with the Director and other
8	appropriate Federal agencies and academic research-
9	ers, shall establish a research, development, and
10	demonstration program—
11	"(A) to study environmentally sound meth-
12	ods and technologies to reduce dispersal of
13	aquatic invasive species through interbasin wa-
14	terways; and
15	"(B) to assess the potential for using those
16	methods and technologies in other waterways.
17	"(2) Additional waterways.—The Assistant
18	Secretary, in consultation with the Director and
19	other relevant Federal agencies, shall identify addi-
20	tional waterways suitable for further dispersal bar-
21	rier research, development, and demonstration
22	projects.".
23	(b) Expansion of Vessel Pathway Technology
24	Demonstration Program.—Section 1104(b) of the

1	Nonindigenous Aquatic Nuisance Prevention and Control
2	Act of 1990 (16 U.S.C. 4712(b)) is amended—
3	(1) by redesignating paragraphs (4) and (5) as
4	paragraphs (6) and (7), respectively; and
5	(2) by inserting after paragraph (3) the fol-
6	lowing:
7	"(4) Additional purposes.—The Secretary
8	of the Interior and the Secretary of Commerce may
9	demonstrate technologies under this subsection to
10	monitor and control pathways of organism transport
11	on vessels other than through ballast water.
12	"(5) Workshop.—The National Oceanic and
13	Atmospheric Administration shall—
14	"(A) hold an annual workshop to encour-
15	age the exchange of information between and
16	among—
17	"(i) principal investigators for which
18	funds are made available under section
19	1110(c); and
20	"(ii) researchers conducting research
21	directly relating to vessel pathway tech-
22	nology development; and
23	"(B) make the results of the proceedings
24	widely available.".

$1\quad \mathbf{SEC.\ 203.\ VESSEL\ PATHWAY\ STANDARDS\ RESEARCH.}$

2	Subtitle B of the Nonindigenous Aquatic Nuisance
3	Prevention and Control Act of 1990 (16 U.S.C. 4711 et
4	seq.) (as amended by section 202(a)) is amended by add-
5	ing at the end the following:
6	"SEC. 1111. VESSEL PATHWAY STANDARDS RESEARCH.
7	"(a) Research Program.—
8	"(1) IN GENERAL.—The Director of the United
9	States Geological Survey and the Administrator of
10	the National Oceanic and Atmospheric Administra-
11	tion (in coordination with the Smithsonian Environ-
12	mental Research Center, the Administrator, the
13	Commandant of the Coast Guard, the Task Force,
14	and other appropriate Federal agencies and aca-
15	demic researchers) shall develop and conduct a re-
16	search program to support the establishment and
17	implementation of standards to prevent the introduc-
18	tion and spread of invasive species by vessels.
19	"(2) Components.—The research program
20	shall include programs to—
21	"(A) characterize physical, chemical, and
22	biological harbor conditions relevant to ballast
23	discharge into waters of the United States to
24	provide information for the design and imple-
25	mentation of vessel vector control technologies
26	and practices;

1	"(B) identify existing and new research ap-
2	proaches to shipboard evaluation and moni-
3	toring of vessel vector control technologies and
4	practices;
5	"(C) research and demonstrate methods
6	for mitigating the spread of invasive species by
7	coastal voyages, including the exploration of the
8	effectiveness of alternative exchange zones in
9	the near coastal areas and other methods pro-
10	posed to reduce the transfers of organisms; and
11	"(D) verify the practical effectiveness of
12	any type approval process to ensure that the
13	process produces repeatable and accurate as-
14	sessments of treatment effectiveness.
15	"(3) Academic researchers.—In carrying
16	out this subsection, the Director of the United
17	States Geological Survey and the Administrator of
18	the National Oceanic and Atmospheric Administra-
19	tion shall—
20	"(A) coordinate with academic researchers;
21	and
22	"(B) as appropriate, contract on a com-
23	petitive basis with academic researchers.
24	"(b) Performance Test.—Not later than 1 year
25	after the date of enactment of the National Aquatic

1	Invasive Species Act of 2002, the Secretary, in conjunc-
2	tion with the National Institute of Standards and Tech-
3	nology and the Maritime Administration, shall design a
4	performance test for ballast water exchange (such as a dye
5	study) to measure the effectiveness of ballast water ex-
6	change.
7	"(c) Best Practices.—Not later than 1 year after
8	the date of enactment of the National Aquatic Invasive
9	Species Act of 2002, the Great Lakes Environmental Re-
10	search Laboratory shall—
11	"(1) identify best practices for improving the
12	effectiveness of ballast water exchange; and
13	"(2) report findings and recommendations to
14	the Invasive Species Council and the Task Force.
15	"(d) National Academy of Sciences Study.—
16	"(1) IN GENERAL.—The Secretary shall enter
17	into an agreement with the National Academy of
18	Sciences under which the Academy shall—
19	"(A) identify the relative risk of transfer of
20	various taxonomic groups of invasive species by
21	different vessel modes;
22	"(B)(i) assess the extent to which a ballast
23	water standard that virtually eliminates the risk
24	of introduction of invasive species by hallast

1	water may relate to the risk of introductions by
2	all vessel modes; and
3	"(ii) explain the degree of uncertainty in
4	such an assessment; and
5	"(C)(i) recommend methods reducing the
6	transfers of invasive species by vessels by ad-
7	dressing all parts and systems of vessels and all
8	related modes of transport of living organisms;
9	and
10	"(ii) identify the research, development,
11	and demonstration needed to improve the infor-
12	mation base to support those methods, includ-
13	ing economic information.
14	"(2) Report.—Not later than 3 years after the
15	date of enactment of the National Aquatic Invasive
16	Species Act of 2002, the Secretary shall submit to
17	Congress a report that describes the results of the
18	study under paragraph (1).
19	"(3) Implementation of recommenda-
20	TIONS.—Not later than the later of the date that is
21	2 years after the date of submission of the report
22	under paragraph (2) or the date that is 5 years after
23	the date of enactment of the National Aquatic
24	Invasive Species Act of 2002, the Task Force, in
25	conjunction with the Administrator, the National In-

1	stitute of Standards and Technology, and other ap-
2	propriate Federal agencies, shall submit to the Sec-
3	retary a report that describes recommendations
4	for—
5	"(A) a vessel pathway treatment standard
6	that incorporates all potential modes of transfer
7	by vessel; and
8	"(B) methods for type approval and accu-
9	rate monitoring of treatment performance that
10	are simple and streamlined.
11	"(e) Working Group.—
12	"(1) In general.—Not later than 2 years
13	after the date of issuance by the Secretary of any
14	standard relating to the introduction by vessels of
15	invasive species, the Secretary shall convene a work-
16	ing group (including the Administrator, the United
17	States Geological Survey, the Smithsonian Environ-
18	mental Research Center, the National Oceanic and
19	Atmospheric Administration, and other appropriate
20	Federal and State agencies and academic research-
21	ers) to evaluate the effectiveness of that standard
22	and accompanying implementation protocols.
23	"(2) Duties.—The duties of the working group
24	shall include, at a minimum—

1	"(A) reviewing the effectiveness of the
2	standard in reducing the establishment of
3	invasive species in aquatic ecosystems, taking
4	into consideration the data collected under sec-
5	tion 1107; and
6	"(B) submitting to the Secretary rec-
7	ommendations for the revision of the standard
8	or implementation procedures (which rec-
9	ommendations shall be made widely available to
10	the public), including—
11	"(i) the type approval process, to en-
12	sure effectiveness in reducing introduc-
13	tions; and
14	"(ii) simple, streamlined, and accurate
15	shipboard monitoring of treatment per-
16	formance.".
17	SEC. 204. GRADUATE EDUCATION IN SYSTEMATICS AND
18	TAXONOMY.
19	Subtitle B of the Nonindigenous Aquatic Nuisance
20	Prevention and Control Act of 1990 (16 U.S.C. 4711 et
21	seq.) (as amended by section 203) is amended by adding
22	at the end the following:

1	"SEC. 1112. GRADUATE EDUCATION IN SYSTEMATICS AND
2	TAXONOMY.
3	"(a) In General.—The National Science Founda-
4	tion shall establish a program to award grants, on a com-
5	petitive basis, to institutions of higher education to carry
6	out research programs in systematics and taxonomy.
7	"(b) Merit Review.—The National Sciences Foun-
8	dation shall provide for merit review of each grant.".
9	TITLE III—AUTHORIZATION OF
10	APPROPRIATIONS
11	SEC. 301. AUTHORIZATION OF APPROPRIATIONS.
12	Section 1301 of the Nonindigenous Aquatic Nuisance
13	Prevention and Control Act of 1990 (16 U.S.C. 4741) is
14	amended to read as follows:
15	"SEC. 1301. AUTHORIZATION OF APPROPRIATIONS.
16	"(a) In General.—Except as otherwise provided in
17	this section, there are authorized to be appropriated such
18	sums as are necessary to carry out this Act for each of
19	fiscal years 2003 through 2007.
20	"(b) Task Force and Aquatic Nuisance Species
21	Program.—There are authorized to be appropriated for
22	each of fiscal years 2003 through 2007—
23	"(1) \$8,000,000, to carry out activities of the
24	Task Force under section 1202, of which—
25	"(A) $$4,000,000$ shall be used by the Di-
26	rector;

1	"(B) $\$3,000,000$ shall be used by the Na-
2	tional Oceanic and Atmospheric Administration;
3	and
4	"(C) $$1,000,000$ shall be used by the
5	Invasive Species Council;
6	"(2) \$30,000,000, to provide grants under sec-
7	tion 1204(b);
8	"(3) \$3,000,000, to provide assistance to the
9	regional panels of the Task Force;
10	"(4) \$1,000,000, to be used by the Director to
11	carry out section 1105(f); and
12	"(5) \$6,000,000, to be used by the Secretary of
13	the Interior to carry out section 1209.
14	"(c) International Coordination.—There is au-
15	thorized to be appropriated to the Department of State
16	to carry out section 1403 \$1,000,000 for each of fiscal
17	years 2003 through 2007.
18	"(d) Prevention of Introduction by Vessels
19	OF AQUATIC INVASIVE SPECIES INTO WATERS OF THE
20	UNITED STATES.—There are authorized to be appro-
21	priated for each of fiscal years 2003 through 2007—
22	"(1) \$6,000,000, to be used by the Secretary to
23	carry out section 1101;
24	"(2) \$2,500,000, to be used by the Adminis-
25	trator to carry out section 1101; and

1	"(3) \$2,750,000, to be used by the Task Force
2	to carry out section 1101, of which—
3	"(A) \$1,500,000 shall be used by the Di-
4	rector; and
5	"(B) $$1,250,000$ shall be used by the Na-
6	tional Oceanic and Atmospheric Administration.
7	"(e) Prevention of the Introduction by Non-
8	VESSEL PATHWAYS OF AQUATIC INVASIVE SPECIES INTO
9	Waters of the United States.—There are authorized
10	to be appropriated for each of fiscal years 2003 through
11	2007—
12	"(1) \$5,000,000, to carry out the priority path-
13	way management program under section 1210, of
14	which—
15	"(A) $$2,000,000$ shall be used by the Na-
16	tional Oceanic and Atmospheric Administration;
17	and
18	"(B) \$3,000,000 shall be used by the Di-
19	rector;
20	"(2) \$1,000,000, to be used by the Invasive
21	Species Council to establish screening guidelines
22	under section 1105(b); and
23	"(3) \$3,500,000, to be used by the Director to
24	promulgate and implement screening requirements
25	under section 1105(f).

1	"(f) Early Detection and Monitoring.—There
2	is authorized to be appropriated, to carry out early detec-
3	tion, monitoring, and survey planning and implementation
4	under section 1106, \$2,000,000 for each of fiscal years
5	2003 and 2004 and \$10,000,000 for each of fiscal years
6	2005 through 2007, of which—
7	"(1) for each of fiscal years 2003 and 2004—
8	((A) \$1,000,000 shall be used by the Na-
9	tional Oceanic and Atmospheric Administration;
10	and
11	(B) \$1,000,000 shall be used by the Di-
12	rector; and
13	"(2) for each of fiscal years 2005 through
14	2007—
15	(A) \$5,000,000 shall be used by the Na-
16	tional Oceanic and Atmospheric Administration;
17	and
18	"(B) $$5,000,000$ shall be used by the Di-
19	rector.
20	"(g) Containment and Control.—
21	"(1) DISPERSAL BARRIERS.—There are author-
22	ized to be appropriated for each of fiscal years 2003
23	through 2007—
24	"(A) \$300,000, to be used by the Assistant
25	Secretary in carrying out operation and mainte-

1	nance of the Chicago River Canal Dispersal
2	Barrier under section 1202(j)(1);
3	"(B) \$1,800,000, to be used by the Assist-
4	ant Secretary in carrying out the complete con-
5	struction of the Chicago River Canal Dispersal
6	Barrier;
7	"(C) \$8,000,000, to be used by the Assist-
8	ant Secretary for the construction of a second
9	long-service life barrier for the Chicago River
10	Canal;
11	"(D) \$500,000, to be used by the Assist-
12	ant Secretary to carry out a feasibility study for
13	the construction described in subparagraph (C);
14	and
15	"(E) \$2,150,000, to be used by the Direc-
16	tor to carry out the monitoring program under
17	section $1202(j)(2)$.
18	"(2) Rapid response.—There are authorized
19	to be appropriated for each of fiscal years 2003
20	through 2007—
21	"(A) \$25,000,000, to the rapid response
22	fund of the Secretary of the Interior established
23	under section 1211;
24	"(B) \$1,000,000, to be used by the
25	Invasive Species Council in developing the State

1	and regional rapid response contingency strat-
2	egy under section 1211; and
3	"(C) $$1,500,000$, to be used for Federal
4	rapid response teams under section 1211(e), of
5	which—
6	"(i) \$500,000 shall be used by the
7	National Oceanic and Atmospheric Admin-
8	istration; and
9	"(ii) \$1,000,000 shall be used by the
10	Director.
11	"(3) Environmental soundness.—There is
12	authorized to be appropriated for establishment
13	under section 1202(k) of criteria for the improve-
14	ment of treatment methods for aquatic invasive spe-
15	cies \$600,000 for each of fiscal years 2003 through
16	2007.
17	"(4) National nutria control program.—
18	There is authorized to be appropriated to the Direc-
19	tor to carry out the national nutria control program
20	under section 1211(f) \$3,000,000 for each of fiscal
21	years 2003 through 2007.
22	"(h) Information, Education and Outreach.—
23	There are authorized to be appropriated for each of fiscal
24	vears 2003 through 2007—

1	"(1) \$500,000, to be used by the Secretary of
2	the Interior to carry out the information and edu-
3	cation program under section 1202(h)(2)(D);
4	"(2) \$750,000, to be used by the Director in
5	carrying out the 100th meridian program under sec-
6	tion $1202(h)(2)(C)$;
7	"(3) \$2,000,000, to be used to carry out infor-
8	mational and educational activities of the Task
9	Force under section 1202(h), of which—
10	((A) \$1,000,000 shall be used by the Na-
11	tional Oceanic and Atmospheric Administration;
12	and
13	(B) \$1,000,000 shall be used by the Di-
14	rector; and
15	"(4) \$500,000, to be used by the National Oce-
16	anic and Atmospheric Administration to carry out
17	section $1202(h)(2)(B)(ii)$.
18	"(i) Research.—
19	"(1) Ecological and pathway research.—
20	There are authorized to be appropriated for each of
21	fiscal years 2003 through 2007—
22	"(A) $$1,500,000$, to be used for the pur-
23	pose of protocol development under section
24	1107(b), of which—

1	"(i) $$1,000,000$ shall be used by the
2	United States Geological Survey; and
3	"(ii) \$500,000 shall be used by the
4	Smithsonian Environmental Research Cen-
5	ter;
6	"(B) \$18,000,000, to be used to carry out
7	comprehensive ecological and pathway surveys
8	(including ballast water discharge surveys)
9	under section 1107, of which—
10	"(i) \$8,000,000 shall be used by the
11	National Oceanic and Atmospheric Admin-
12	istration; and
13	"(ii) \$10,000,000 shall be used by the
14	Director of the United States Geological
15	Survey;
16	"(C) \$7,000,000, to be used by the United
17	States Geological Survey to carry out experi-
18	mentation under section 1107(g);
19	"(D) \$1,650,000, to be used by the Great
20	Lakes Environmental Research Laboratory to
21	carry out the invasive species demonstration
22	program under section 1202(i); and
23	"(E) \$1,000,000, to be used by the Smith-
24	sonian Environmental Research Center to de-

1	velop the national database under section
2	1107(h).
3	"(2) Analysis.—There are authorized to be
4	appropriated for each of fiscal years 2003 through
5	2007—
6	"(A) $$1,500,000$, to be used for the pur-
7	pose of invasion analysis under section 1108(a)
8	of which—
9	"(i) \$500,000 shall be used by the
10	National Oceanic and Atmospheric Admin-
11	istration;
12	"(ii) \$500,000 shall be used by the
13	Director;
14	"(iii) \$500,000 shall be used by the
15	Smithsonian Environmental Research Cen-
16	ter;
17	"(B) \$2,000,000, to be used to develop a
18	profile under section 1108(b) to predict the es-
19	tablishment of species and priorities of path-
20	ways, of which—
21	"(i) \$1,000,000 shall be used by the
22	Director of the United States Geological
23	Survey;

1	"(ii) \$500,000 shall be used by the
2	National Oceanic and Atmospheric Admin-
3	istration; and
4	"(iii) \$500,000 shall be used by the
5	Smithsonian Environmental Research Cen-
6	$ ext{ter};$
7	"(C) \$500,000, to be used by the Invasive
8	Species Council for the dissemination of infor-
9	mation under section 1109;
10	"(D) \$3,000,000, to carry out section
11	1110, of which—
12	"(i) \$1,500,000 shall be used by the
13	Administrator for the purposes of environ-
14	mental soundness screening and improve-
15	ment under section 1110(a);
16	"(ii) \$500,000 shall be used by the
17	Assistant Secretary to carry out section
18	1110(a); and
19	"(iii) \$1,000,000 shall be used by the
20	Assistant Secretary to carry out the pro-
21	gram under section 1110(b);
22	"(E) \$5,000,000, to carry out vessel path-
23	way technology development under sections
24	1104 and 1301(e);

1	"(F) \$500,000, to be used for research in
2	support of vessels pathway standards and tech-
3	nology evaluation under section 1111, of
4	which—
5	"(i) \$2,000,000 shall be used by the
6	Director of the United States Geological
7	Survey; and
8	"(ii) \$1,000,000 shall be used by the
9	National Oceanic and Atmospheric Admin-
10	istration;
11	"(G) \$500,000, to be used by the National
12	Academy of Sciences to carry out the study
13	under section 1111(d); and
14	"(H) $$5,000,000$, to be used by the Na-
15	tional Science Foundation to provide research
16	grants for systematics and taxonomy under sec-
17	tion 1112.".
18	TITLE IV—CONFORMING
19	AMENDMENTS
20	SEC. 401. CONFORMING AMENDMENTS.
21	(a) In General.—The Nonindigenous Aquatic Nui-
22	sance Prevention and Control Act of 1990 is amended—
23	(1) in section 1101 (16 U.S.C. 4711), by strik-
24	ing the section heading and inserting the following:

1	"SEC. 1101. PREVENTION OF INTRODUCTION OF AQUATIC
2	INVASIVE SPECIES INTO WATERS OF THE
3	UNITED STATES BY VESSELS.";
4	(2) in section 1102 (16 U.S.C. 4712)—
5	(A) in subsection (a), by striking the sub-
6	section heading and inserting the following:
7	"(a) Studies on Introduction of Aquatic Invasive
8	Species by Vessels.—"; and
9	(B) in subsection (b)—
10	(i) by striking paragraph (1); and
11	(ii) by redesignating paragraphs (2)
12	and (3) as paragraphs (1) and (2), respec-
13	tively;
14	(3) in subtitle C (16 U.S.C. 4721 et seq.), by
15	striking the subtitle heading and inserting the fol-
16	lowing:
17	"Subtitle C—Prevention and Con-
18	trol of Aquatic Invasive Species
19	Dispersal";
20	(4) in section 1201(a) (16 U.S.C. 4721(a)), by
21	striking "Nuisance Species" and inserting "Invasive
22	Species";
23	(5) in section 1202 (16 U.S.C. 4722), by strik-
24	ing the section heading and inserting the following:

1	"SEC. 1202. AQUATIC INVASIVE SPECIES PROGRAM.";
2	(6) in section 1204 (16 U.S.C. 4724), by strik-
3	ing the section heading and inserting the following:
4	"SEC. 1204. STATE AQUATIC INVASIVE SPECIES MANAGE-
5	MENT PLANS.";
6	and
7	(7) by striking "aquatic nuisance species" each
8	place it appears and inserting "aquatic invasive spe-
9	cies".
10	(b) Short Title.—
11	(1) Section 1001 of the Nonindigenous Aquatic
12	Nuisance Prevention and Control Act of 1990 (16
13	U.S.C. 4701) is amended by striking "Nonindige-
14	nous Aquatic Nuisance" and inserting "Nonindige-
15	nous Aquatic Invasive Species".
16	(2) References.—Any reference in a law,
17	map, regulation, document, paper, or other record of
18	the United States to the Nonindigenous Aquatic
19	Nuisance Prevention and Control Act of 1990 shall
20	be deemed to be a reference to the Nonindigenous
21	Aquatic Invasive Species Prevention and Control Act
22	of 1990.