de Fuca Strait, Haro Strait, Boundary Pass, Georgia Strait, and the waters surrounding the San Juan Islands.

Dated: August 5, 1996.

Jeannie K. Drevenak,

Acting Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 96–20896 Filed 8–15–96; 8:45 am]

BILLING CODE 3510–22–F

[I.D. 081296B]

Marine Mammals; Scientific Research Permit (P368G)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Receipt of application.

SUMMARY: Notice is hereby given that James Harvey, Ph.D. and Jenifer Hurley, Ph.D., Moss Landing Laboratory, P.O. Box 450, Moss Landing, CA (95039–0450), has applied in due form for a permit to take marine mammals for purposes of scientific research.

DATES: Written comments must be received on or before September 16, 1996.

ADDRESSES: The application and related documents are available for review upon written request or by appointment in the following office(s):

Permits Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13130, Silver Spring, MD 20910 (301/713–2289); and

Director, Southwest Region, NMFS, 501 West Ocean Blvd., Suite 4200, Long Beach CA 90802–4213.

Written data or views, or requests for a public hearing on this request, should be submitted to the Director, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13130, Silver Spring, MD 20910. Those individuals requesting a hearing should set forth the specific reasons why a hearing on this particular request would be appropriate.

Concurrent with the publication of this notice in the Federal Register, NMFS is forwarding copies of this application to the Marine Mammal Commission and its Committee of Scientific Advisors.

SUPPLEMENTARY INFORMATION: The subject permit is requested under the authority of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR part 216), the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), and the regulations governing the taking, importing, and exporting of endangered fish and wildlife (50 CFR part 222).

The applicant proposes to obtain up to 10 California sea lions (*Zalophus californianus*) to conduct three research projects: (1) videocamera study—sea lions will be trained to carry a videocamera attached to a backpack and will swim alongside whales allowing underwater recording of whale behaviors (e.g., diving, feeding and mating); (2) tag attachment—sea lions will be used to deliver and attach small radio and TDR tags on the backs of large whales. Annually, up to 30 each blue whales (*Balaenoptera musculus*) and fin whales (*B. physalus*), 60 humpback whales (*Megaptera novaeangliae*), 100 gray whales (*Eschrichtius robustus*), 20 each minke whales (*Balaenoptera acutorostrata*) and sperm whales (*Physeter catodon*), will be tagged, and up to 100 gray whales may be inadvertently harassed during research activities; and (3) physiological study—the trained sea lions will participate in a study of the diving physiology of this species in the open ocean.

Dated: August 12, 1996.

Jeannie Drevenak,

Acting Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 96–20911 Filed 8–15–96; 8:45 am]

BILLING CODE 3510–22–F

[I.D. 080996A]

Marine Mammals; Scientific Research Permit No. 1006 (P466C)

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Issuance of permit.

SUMMARY: Notice is hereby given that a permit for scientific research has been issued to Mr. Scott D. Kraus, Edgerton Research Laboratory, New England Aquarium, Central Wharf, Boston, Massachusetts 02110–3399.

ADDRESSES: The permit and related documents are available for review upon written request or by appointment in the following offices:

Permits Division, Office of Protected Resources, NMFS, 1315 East-West Highway, Room 13130, Silver Spring, MD 20910 (301/713–2289); and

Director, Northeast Region, NMFS, One Blackburn Drive, Gloucester, MA 01930–2298 (508/281–9250).

SUPPLEMENTARY INFORMATION: On May 28, 1996, notice was published in the Federal Register (61 FR 26505) that a request for a scientific research permit had been submitted by the above-named applicant. The request was to harass harbor porpoise in the Gulf of Maine during the course of underwater acoustic playback experiments. The requested permit has been issued under the authority of the Marine Mammal Protection Act of 1972, as amended (16 U.S.C. 1361 *et seq.*), and the Regulations Governing the Taking and Importing of Marine Mammals (50 CFR Part 216).

Dated: August 9, 1996.

William W. Windom,

Acting Chief, Permits and Documentation Division, Office of Protected Resources, National Marine Fisheries Service.

[FR Doc. 96–20978 Filed 8–15–96; 8:45 am]

BILLING CODE 3510–22–F

CONGRESSIONAL BUDGET OFFICE

Notice of Transmittal of Sequestration Update Report for Fiscal Year 1997 to Congress and the Office of Management and Budget

Pursuant to Section 254(b) of the Balanced Budget and Emergency Deficit Control Act of 1985 (2 U.S.C. 904(b)), the Congressional Budget Office hereby reports that it has submitted its Sequestration Update Report for Fiscal Year 1997 to the House of Representatives, the Senate, and the Office of Management and Budget.

Stanley L. Greigg,

Director, Office of Intergovernmental Relations, Congressional Budget Office.

[FR Doc. 96–20842 Filed 8–15–96; 8:45 am]

BILLING CODE 95–0702–M

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

National Action Plan to Develop the Hydrogeomorphic Approach for Assessing Wetland Functions

AGENCY: U.S. Army Corps of Engineers, DoD.

ACTION: Notice of intent and request for comments.

SUMMARY: The Corps of Engineers is announcing, through the National Action Plan, the strategy the Corps and other Federal agencies will follow to develop the Hydrogeomorphic Approach for Assessing Wetland Functions (HGM Approach). The National Action Plan was developed by a National Interagency Implementation Team. Agencies represented on the Implementation Team are the Corps of

Engineers, Environmental Protection Agency, Natural Resource Conservation Service, Federal Highways Administration, and the U.S. Fish and Wildlife Service. The HGM Approach is being developed primarily for use in the context of the Clean Water Act Section 404 regulatory program where time and resources are often limited. This notice provides the National Action Plan for review and opportunity for comment. While not required by law or regulation, the Corps is publishing the National Action Plan for review and comment.

DATES: Comments on the National Action Plan must be received by September 16, 1996.

ADDRESSES: Written comments may be submitted to the U.S. Army Corps of Engineers, ATTN: CECW–OR, HGM Docket, 20 Massachusetts Avenue NW., Washington, DC 20314–1000 or faxed to (202) 761–5096.

FOR FURTHER INFORMATION CONTACT: Ms. Colleen Charles, Corps of Engineers, at (202) 761–0199; Ms. Sandra Byrd-Hughes, Natural Resource Conservation Service, at (202) 690–3501; Mr. Thomas Kelsch, Environmental Protection Agency, at (202) 260–8795; Mr. Paul Garrett, Federal Highways Administration, at (202) 366–2067; and Mr. Donald MacLean, Fish and Wildlife Service, at (703) 358–2201.

SUPPLEMENTARY INFORMATION: The Clinton Administration's Wetlands Plan addressed the need for improvement of wetlands assessment techniques to allow for better consideration of wetlands functions in permit decisions. The HGM Approach is a wetland assessment procedure that will increase the accuracy of wetland function assessments, allow for replicability, and reduce the amount of time required to conduct a wetland function assessment. The HGM Approach is based on three fundamental factors that influence how wetlands function: position in the landscape (geomorphic setting), water source (hydrology), and the flow and fluctuation of the water once in the wetland (hydrodynamics). The HGM Approach first classifies wetlands based on their differences in functioning, second it defines functions that each class of wetlands performs, and third it uses reference to establish the range of functioning of the wetland. Regional assessment models are developed based on the functional profile that describes the physical, biological, and chemical characteristics of a regional wetland subclass. The goal of the National Action Plan is to develop, over the next two years, sufficient assessment models to address 80 percent of the Section 404 permit workload requiring wetland function assessments. To achieve this goal, approximately 25–30 regional subclass models will be required to be developed. Given the magnitude of the effort, and the need for interdisciplinary expertise, development of the HGM Approach will require participation from several Federal, State, Tribal and local agencies, academia, and the private sector. This involvement will occur at all stages of model development.

Robert W. Burkhardt,

Assistant Chief, Operations, Construction, and Readiness Division, Directorate of Civil Works.

National Action Plan To Develop the Hydrogeomorphic Approach for Assessing Wetland Functions

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National Action Plan to Develop the Hydrogeomorphic Approach for Assessing Wetland Functions

I. Executive Summary

The National Action Plan to Develop the Hydrogeomorphic Approach for Assessing Wetland Functions (Action Plan) identifies the strategy the Corps and other Federal agencies will follow to develop this new wetlands function assessment methodology. The Hydrogeomorphic Approach for Assessing Wetland Functions (HGM approach) is a procedure for measuring the capacity of a wetland to perform functions. The procedure was designed to satisfy the technical and programmatic requirements of the Clean Water Act Section 404 regulatory program where time and resources are often limited. Information obtained from application of the HGM Approach can assist project proponents and regulators in assessing the level of environmental impact of a proposed project, in determining the appropriate level of regulatory review, and in assessing compensatory mitigation required for offsetting environmental impacts. The hierarchical and modular nature of the procedure make it adaptable to a variety of other regulatory, planning, management, and educational situations where information on wetland functions is needed.

The HGM Approach is different from other assessment procedures in that it first classifies wetlands based on their differences in functioning, second it defines functions that each class of wetlands performs, and third it uses ''reference'' to establish the range of functioning of the wetland. Functional classification narrows the focus of attention to the functions a particular wetland type is most likely to perform and to the ecological characteristics that control these functions. This increases the accuracy of the assessment, allows for replicability, and reduces the amount of time needed to conduct the assessment. The approach also utilizes ''reference wetlands'' as the means for establishing the scale, or index, against which other wetlands of the same type in a particular geographic area can be compared to determine their functional capacity. Reference wetlands are selected to reflect the range of conditions in a particular geographic area that a particular wetland type may exhibit, from relatively undisturbed to highly degraded.

Under the HGM Approach national guidebooks are being developed for each of the major classes of wetlands: riverine, depressional, slope, flats (mineral soil and organic soil), and fringe (estuarine and lacustrine). The national guidebooks provide standard templates upon which models for regional guidebooks are developed for specific wetland subclasses. Regional guidebooks include assessment models for each regional wetland subclass as well as subclass descriptions, functional profiles, and implementation methods. Interdisciplinary teams of wetland specialists from Federal, State, and local agencies as well as the private sector and academia, will coordinate the development of assessment models for each regional guidebook. To ensure the

technical accuracy of the effort, assessment models will be subjected to a rigorous peer review process involving wetland experts from Federal, State, Tribal and local agencies, academia and the private sector. Each regional guidebook will be published initially as an operational draft for a two year period that will provide agencies, academia, and the private sector with an opportunity to review and apply the procedure and provide comments. Issues raised as a result of application of the operational drafts will be addressed in the final publication. The final regional guidebooks will be reviewed and revised on an as needed basis not to exceed a five year period to ensure the best available science is incorporated into the assessment model.

Development of the HGM Approach is being accomplished in three phases because of the time and effort needed to develop regional guidebooks. These efforts will be prioritized so that at the end of Phase II there are a sufficient number of regional guidebooks to address 80 percent of the Section 404 permit workload requiring a functional assessment. Given limited agency resources, it is clear that such an undertaking will require the coordinated participation of other Federal, State, Tribal, and local agencies, as well as individuals from academia, and the private sector. State agencies and others who choose to initiate development of assessment models on their own will be encouraged to coordinate with the Federal agencies to ensure quality control in model development and the maximum applicability of the product by State, Federal, and local agencies.

Technical support for the development of the HGM Approach is being provided by the U.S. Army Engineer Waterways Experiment Station (WES). To facilitate development of the regional guidebooks, WES, in conjunction with other Federal and State agencies and other wetland experts, has developed, and will continue to develop, the necessary support documents, technical information and training materials. Experts from WES will oversee the development of regional guidebooks to ensure consistency and accuracy in these efforts.

To supplement development of the HGM Approach, the Federal agencies will be preparing a policy statement in the near future to clarify the application of the HGM Approach within the Section 404 regulatory program. For example, the procedure may be used to rapidly and consistently determine the level of environmental impact of a proposed project, to compare project alternatives, to identify measures that would minimize environmental impacts, to determine mitigation requirements, and to establish standards for measuring mitigation success. The policy statement will indicate the manner in which such applications can provide greater certainty and consistency within the decision making process.

II. Overview of HGM Approach

The Hydrogeomorphic Approach to Assessing Wetland Functions (HGM Approach), developed by scientists at the U.S. Army Engineer Waterways Experiment Station (WES), is a procedure for measuring the capacity of a wetland to perform functions. The procedure was designed to satisfy the technical and programmatic requirements of the Clean Water Act Section 404 (Section 404) regulatory program where time and resources are often limited. However, the hierarchical and modular nature of the procedure make it adaptable to a variety of other regulatory, planning, management, and educational situations requiring the assessment of wetland functions.

The HGM Approach is different from other assessment procedures in that it first classifies wetlands based on their differences in functioning, second it defines functions that each class of wetlands performs, and third it uses ''reference'' to establish the range of functioning of the wetland. HGM is a hierarchical classification with five major hydrogeomorphic wetland classes. These classes are: riverine, depressional, slope, flats (organic soil and mineral soil), and fringe (estuarine and lacustrine). The HGM Approach is based on three fundamental factors that influence how wetlands function: position of the wetland in the landscape (geomorphic setting), water source (hydrology), and the flow and fluctuation of the water once in the wetland (hydrodynamics). Within a specific geographic area wetland classes can be further divided into regional subclasses (e.g., vernal pools in California, prairie potholes in the northern plains states, and pine flatwoods in the southeastern U.S.). Classifying wetlands based on how they function narrows the focus of attention to a specific type or subclass of wetland, the functions that wetlands within the subclass are most likely to perform, and the landscape and ecosystem factors that are most likely to influence how wetlands in the subclass function. (See Table 1.) This increases the accuracy of the assessment, allows for replicability, and reduces the amount of time needed to conduct the assessment.

TABLE 1.—HYDROGEOMORPHIC CLASSES OF WETLANDS SHOWING ASSOCIATED DOMINANT WATER SOURCES, HYDRODYNAMICS, AND EXAMPLES OF SUBCLASSES

Hydrogeomorphic class	Dominant water source	Dominant hydrodynamics	Examples of subclass	
			Eastern USA	Western USA
Riverine	Overbank flow from channel..	Unidirectional, horizontal.	Bottomland hardwood forests	Riparian forested.
Depressional	Return flow from groundwater and interflow.	Vertical	Prairie potholes marshes	California vernal pools.
Slope	Return flow from groundwater	Unidirectional, horizontal.	Fens	Montane seeps.
Flats (mineral soil)	Precipitation	Vertical	Wet pine flatwoods	Playas.
Flats (organic soil)	Precipitation	Vertical	Peat bogs, portions of Everglades.	Peat bogs.
Fringe (Estuarine)	Overbank flow from estuary..	Bidirectional, horizontal.	Chesapeake Bay marshes	San Francisco Bay marshes.
Fringe (Lacustrine)	Overbank flow from lake	Bidirectional, horizontal.	Great Lakes marshes	Flathead Lake marshes

Source: Brinson et al., An approach for assessing wetland functions using hydrogeomorphic classification, reference wetlands, and functional indices. U.S. Army Corps of Engineers Waterways Experiment Station, Technical Report TR WRP–DE–10. Vicksburg, MS. Oct. 1995.

The HGM Approach includes a development phase and an application phase. The development phase is carried out by an interdisciplinary team of wetland experts (A-team) and begins with the classification of wetlands into regional subclasses. The A-team then develops a functional profile that describes the physical, chemical, and biological characteristics (wetland functions) of the regional subclass, identifies which functions are most likely to be performed, and discusses different ecosystem and landscape attributes that influence each function. The functional profile is based on the experience and expertise of the A-team and information from reference wetlands. Reference wetlands are selected from a reference domain (or a defined geographic area) and represent sites that exhibit a range of variation within a particular wetland type including sites that have been degraded/disturbed as well as those sites which have had little disturbance. The A-team next develops and calibrates assessment models. These models define the relationship between attributes of the wetland ecosystem and surrounding landscape and the capacity of a wetland to perform a function. The assessment model results in a functional index (0–1), which estimates the capacity of a wetland to perform a function relative to other wetlands from the same regional subclass in the reference domain. The standard of comparison used to scale functional indices are reference standards, or the conditions under which the highest, sustainable level of function is achieved across the suite of functions performed by wetlands in a regional subclass.

The application phase of the HGM Approach can be used to assess wetland functions in the context of a Section 404 permit application review as well as in the context of a planning or management project. Regulators can use this procedure to rapidly and accurately determine the level of environmental impacts of proposed projects, compare project alternatives, identify measures that would minimize environmental impacts, determine mitigation requirements, and establish criteria for measuring mitigation success. As such, the procedure will be helpful in providing greater certainty, reduced permit review times and more rapid decision making.

The HGM Approach is designed to focus on wetland functions and not to address values. Values represent the significance of wetland functions to society or individuals. The functional indices developed under this approach cannot be used to assign values to wetland functions in terms of economic or other value units as required by the public interest review process since values often reflect local priorities and may reflect policy issues beyond the scope of this method. Local priorities can also change over time and, therefore, must often be redefined at different periods of time. Information provided by the HGM Approach can serve as the basis for establishing public values, and thus aid in the shaping of national and regional management policies.

III. Development Strategies of the HGM Approach

A. Goals and Objectives for Development

The primary goal for the development of the HGM Approach is to have a standardized assessment methodology that can be applied consistently in a diversity of wetland types throughout the United States, uses the best available technical information, and maintains compatibility with the time and resource framework of the Section 404 Regulatory Program. The objective is to develop, during the next two years, sufficient assessment models to address 80 percent of the Section 404 permit work load requiring functional assessments. The Section 404 permit work load requiring functional assessments will generally be the individual and general permits requiring compensatory mitigation.

To achieve this goal the Corps and other Federal agencies have formed a National Interagency Implementation Team (Implementation Team). The Implementation Team is responsible for preparing a National Action Plan to Develop the HGM Approach for Assessing Wetland Functions (Action Plan). The Action Plan identifies the strategy the Federal agencies will follow in developing this new assessment methodology to meet the objective of addressing 80 percent of the Section 404 regulatory permit workload requiring functional assessments.

To achieve this objective the regional subclass models and regional guidebooks will:

(1) Be developed in a consistent and coordinated manner to facilitate state and federal interagency agreement on applications of the HGM approach. This will require involving experts from academia and the private sector, as well as Federal, State, Tribal and local agencies at all stages and levels of review;

(2) Utilize the best scientific information in the development of each model;

(3) Develop assessment models based on national and regional priorities for the Regulatory program;

(4) Make the most efficient use of limited agency resources; and

(5) Ensure private sector involvement at all stages and levels of development.

B. Development of the HGM Approach

Development of the HGM Approach is a multi-step procedure and will require the participation by several Federal, State, Tribal and local agencies, as well as experts from academia and the private sector. This participation will occur at all stages of the model development process starting with initial model development through model calibration, verification, and validation of the revised model.

The first step of this multi-step procedure was to identify the priority for model development of wetland subclasses through surveys of Corps district offices. The next step is to establish regional assessment teams (A-teams) from participating agency specialists that are trained in the HGM classification and approach. The A-teams will identify and prioritize regional wetland subclasses and define the reference domain.

Once the regional subclasses and reference domain have been identified, assessment models for wetland functions will be drafted based on a review of the literature and review of existing models. Model development will include identification of reference wetland sites, functions for each wetland subclass, variables for each function, and development of functional indices. The draft models will then go through an interdisciplinary peer review in a technical workshop format to provide individuals with expertise on the hydrology, soils, vegetation and wildlife use of each regional subclass an opportunity to critique the draft assessment model. The workshop participants will include wetland experts from Federal, State, Tribal, and local agencies and individuals from academia and the private sector and will be an integral part of model development. At the workshop the model will be critiqued and revised as needed to reflect recommendations from the workshop participants. After model review and revision the draft model will be calibrated with data collected by the A-team from reference wetland sites and field tested for accuracy and sensitivity of functional indices. The model will then be published as a draft operational regional wetland subclass guidebook (operational draft) for a two year period prior to final publication. The operational draft will include a

description and range of the regional wetland subclass, a functional profile, the functional assessment models, and application instructions with field data sheets. The first year following draft publication, review comments will be solicited during which time the operational draft models will be subjected to further extensive field testing by the Federal agencies. Review comments will be incorporated into a final model. The final model will undergo review and revision as needed on a periodic basis not to exceed a five year length of time to ensure that new technical data and research are incorporated into the model.

C. Agency Roles and Coordination

Given the magnitude of the effort, and the need for interdisciplinary expertise, development of the HGM Approach will require participation from several Federal, State, Tribal and local agencies, academia, private consultants and other wetlands experts. The following identifies how such involvement will be coordinated.

1. National Interagency Implementation Team (Implementation Team)

The Action Plan will be administered by a National Interagency Implementation Team chaired by a representative from the U.S. Army Corps of Engineers (Corps). Other agencies represented on the Implementation Team will be the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), USDA—Natural Resources Conservation Service (NRCS), the Federal Highway Administration (FHWA), and NOAA—National Marine Fisheries Service. Technical assistance will be provided to the Implementation Team by representatives of Waterways Experiment Station (WES), and others involved in the development of the HGM Approach.

The Implementation Team is responsible for ensuring that the Action Plan is implemented in a consistent and timely fashion, and that the concerns and priorities of each agency are considered. They will meet on an as needed basis to assess progress, ensure timely development of products, and address problems and potential inconsistencies.

2. Regional Assessment Teams (A-Teams)

Regional assessment teams (A-teams) will include scientists with expertise in wetland hydrology, biochemistry, soils, plants, and wildlife with representation from each agency on the Implementation Team, as appropriate. The representative from the Corps will serve as the A-team leader. It is the primary responsibility of the A-team to develop regional functional assessment models and guidebooks. To accomplish this each A-team is tasked with identifying reference wetlands and developing functional assessment models and guidebooks for priority regional wetland subclasses. Specific responsibilities of the A-team are listed below:

- Identify regional wetland subclasses and define reference domains.
- Identify reference wetland sites.
- Identify functions for each subclass.
- Identify variables and develop functional assessment models.
- Conduct interagency and interdisciplinary workshop to critique models.
- Collect data from reference wetland sites.
- Calibrate functional assessment models using reference wetland data.
- Verify and validate the accuracy and sensitivity of functional indices.

A-teams will solicit technical input from other wetland experts as necessary to accomplish their objectives. A-teams will meet on an as needed basis during the development and implementation of regional assessment models. It is anticipated that development of each model will take approximately one year to complete.

3. WES as Technical Support Center

WES will serve as the primary technical support center for coordination of all model development. It is anticipated that a representative from WES will provide technical support to the A-teams. WES will also maintain standards for quality control (protocols), in concert with other Federal agencies, and facilitate publication of all HGM documents. WES will also serve as the center for training and outreach activities related to the HGM Approach.

4. Coordination With State, Tribal and Local Agencies, Academia and the Private Sector

It is the intent of the Federal agencies to involve representatives from appropriate State, Tribal and local agencies, as well as local experts from academia and the private sector in the development of regional assessment models. Input will be solicited regarding the technical accuracy of the model, as well as its applicability to Federal, State, Tribal and local wetlands programs. A-teams will be responsible for identifying individuals outside of the Federal government with expertise on the hydrology, biogeochemical processes, soils, and habitat functions of the regional wetland subclass to participate in the peer review.

Concurrently, it is anticipated that many State regulatory and/or resource agencies will be interested in taking the lead in developing similar assessment methods using the HGM Approach for their own regulatory programs and other purposes. Assessment models developed by State agencies may be accepted for use within Federal programs if they satisfy Federal quality control standards. For this reason, States are encouraged to coordinate with WES at the initiation of the project to ensure consistency with Federal efforts. The Federal agencies will work to establish collaborative efforts with States in the development of regional HGM assessment models to ensure maximum efficiency of both efforts and the broadest possible application of the assessment methods.

Moreover, many States have on-going research supporting the development of monitoring programs to characterize and assess the condition of their wetland resources. The HGM Approach provides a useful framework for targeting States' data collection and research efforts. Many States have increased their efforts to monitor and document the ecological condition of their wetlands in recent years. This information is used to define more appropriate and specific wetland water quality standards, to report on the health of States' aquatic systems for Clean Water Act Section 305(b) purposes, and to set performance criteria for wetland restoration and mitigation projects. Much of the data from these activities can support the development of functional assessment models based on the HGM Approach. Federal and State agencies undertaking the development of regional assessment models are encouraged to coordinate with these State research and monitoring programs to facilitate an exchange of technical information.

Finally, there may be circumstances where a functional assessment model based on the HGM Approach is developed for a specific application (e.g., within a watershed planning effort, for a particular permit application). In such cases, entities responsible for developing the model are encouraged, to the maximum extent practicable, to follow the standard protocol for developing a regional assessment model. It is anticipated that these models may then serve as the basis for Federal or State efforts to expand the scope of applicability of the model through additional calibration and peer review.

D. Quality Control for Model Development

While the agencies recognize that the steps needed to develop each model will vary based on the unique circumstances of each effort, certain minimum requirements must be met to ensure consistency, technical accuracy and interagency support for the development of each regional guidebook. The protocol (minimum steps) to be followed in regional model guidebook development and the implementation process involve several phases. These phases, listed in Table 2, are described in detail in the draft guidance from WES, Development of Regional Wetland Subclass HGM Functional Assessment Model Guidebooks (May 1996). The Implementation Team will maintain oversight to ensure product development focuses on priority wetland types and meets agency needs. In order to satisfy Federal standards for quality and consistency, models developed by consultants or other A-teams not formed by the Federal agencies will be required to perform the steps described in Table 2 if those models are to be used within Federal programs. Entities undertaking separate efforts to develop HGM functional assessment models are encouraged to inform the Corps early on of their intent and provide timely opportunities for agency participation and review. Any model developed by an entity other than the Federal agencies must be reviewed by the agencies prior to application under Federal programs to ensure consistency with quality assurance steps outlined in this document, including agency and private sector peer review.

TABLE 2.—STEPS IN DEVELOPMENT OF MODEL GUIDEBOOKS (DRAFT)

Phase I: Organization of Regional Assessment Team:
A. Identify A-Team members
B. Train members in HGM classification and assessment
Phase II: Identification of Regional Wetland Assessment Needs:
A. Identify regional wetland subclasses
B. Prioritize regional wetland subclasses
C. Define reference domains
D. Initiate literature review
Phase III: Draft Model Development:
A. Review existing models of wetland functions
B. Identify reference wetland sites
C. Identify functions for each subclass
D. Identify variables and measures
E. Develop functional indices
Phase IV: Draft Regional Wetland Model Review:
A. Obtain peer-review of draft model
B. Conduct interagency and interdisciplinary workshop to critique model
C. Revise model to reflect recommendations from peer-review and workshop
D. Obtain second peer-review of draft model
Phase V: Model Calibration:
A. Collect data from reference wetland sites
B. Calibrate functional indices using reference wetland data
C. Field test accuracy and sensitivity of functional indices
Phase VI: Draft Model Guidebook Publication:
A. Develop draft model guidebook
B. Obtain peer-review of draft guidebook
C. Publish as an Operational Draft of the Regional Wetland Subclass HGM Functional Assessment Guidebook to be used in the field
Phase VII: Implement Draft Model Guidebook:
A. Identify users of HGM Functional Assessment
B. Train users in HGM classification and evaluation
C. Provide assistance to users
Phase VIII: Review and Revise Draft Model Guidebook

E. Training and Outreach

1. Training

Training on the HGM Approach will be necessary to ensure consistent development and application of regional assessment models. Four different training courses proposed to be offered by the Federal agencies are based on the needs of different users. These courses range from an introductory course to familiarize program administrators with the HGM Approach to technical training in regional subclass model development and the application of the HGM Approach. The proposed courses are briefly described below.

A. HGM Executive Course—This course will be designed for executive and management personnel who need to understand the basics of the HGM Approach and application, but do not need to either develop or apply functional assessment models. The course will be approximately two days in length and provide background on the HGM Approach, the conceptual basis of HGM, and how the models are developed and applied. The course will also provide program administrators with information necessary to evaluate the proper development and application of the regional subclass models.

B. HGM Application Course—A second course will be offered to those individuals directly responsible for applying HGM models in the field. The course objective will be to ensure students are as proficient as possible in applying regional subclass models and in evaluating the application of HGM models. The course will focus on the application of models under different scenarios such as project impact assessment, alternative analysis, and mitigation design/monitoring. It will require a full five days to complete with considerable emphasis on field work. This course will be offered through the Corps regulatory training curriculum.

C. HGM Model Development—This course will be designed for personnel responsible for drafting and testing new HGM models. It is anticipated that participants will have an adequate understanding of the HGM Application course. Students will be provided

information on the sequence of steps necessary to develop models and the lessons learned from prior development efforts. The course will be approximately three days long and include field exercises on identifying and collecting data from reference wetlands.

D. Train the Trainers—A fourth course will be offered to train those individuals who will be responsible for local training. The course objective will be to enable students who are proficient in the HGM Approach and model development to train others in the HGM Approach, model development, and application. This course will be two days in length with a pre-requisite of having extensive experience in the HGM Approach.

2. Outreach

In addition to this Action Plan and the training courses the Federal agencies are proposing, additional outreach efforts are planned to ensure that State, Tribal, local agencies and the general public are informed on the HGM Approach, including the direction the Federal agencies will follow in developing and implementing the HGM Approach. The following strategy identifies additional steps the agencies will take over the next few years to meet that objective.

All technical publications included under the HGM Approach (e.g., national and regional guidebooks, supporting technical documents) will be published by WES under an interagency logo. Once published, these documents may be obtained by interested parties through an appropriate Federal publications office, including the National Technical Information Service (NTIS). In addition, WES will develop a home page on the Internet dedicated to the HGM Approach to make pertinent documents available electronically. The home page will include a quarterly publication to update interested readers on the status of efforts to develop and implement the HGM Approach. Among the information included in this publication will be a current listing of completed national and regional guidebooks (including both operational and final drafts), as well as information concerning the status of other models under development.

WES will also have the primary Federal lead for keeping the scientific community informed about the HGM Approach through the presentation of information at appropriate professional meetings and within technical publications. Similarly, the Federal agencies will make information available to professional trade organizations and journals to ensure that the regulated community and others are informed on the development of the HGM Approach. EPA's Wetlands Information Hotline (1–800–832–7828) will also serve as a distribution center for HGM materials. In addition to the Federal agency training programs described above, it is anticipated that private wetland training institutes will begin to provide additional training opportunities for both the public and private sectors. In addition to these formal training programs, the agencies anticipate sponsoring short seminars on the HGM Approach to respond to local interests or needs.

F. Policy Statement

Concurrent with development of the HGM Approach, the Federal agencies will develop a policy statement clarifying how the HGM Approach can be used within the Section 404 program to improve regulatory decision making. The policy statement will address various issues, including how information on wetland functions generated by the HGM approach will be used by regulators to make timely and consistent decisions that are reflective of the relative functional capacity of different wetlands. In addition, the policy statement will discuss how other important factors, such as the relative value of wetland functions, are to be considered in the decision making process. The policy statement will be published in the Federal Register for public review and comment prior to final issuance by the Federal agencies.

IV. HGM Documents

The following documents have been or are expected to be published by WES as part of the development strategy. Published documents are available through the National Technical Information Service at (703) 487–4650.

A. HGM Classification of Wetlands (Brinson, 1993)—This document lays out an approach for classifying wetlands into similar functional types (classes and subclasses) based on their hydrogeomorphic characteristics. Wetlands are initially classified based on three major characteristics: (1) geomorphic setting, (2) water source, and (3) hydrodynamics. The five major wetland classes are depression, slope, flats, fringe, and riverine. (Brinson has since revised this to seven major classes: riverine, depression, slope, mineral soil flats, organic soil flats, estuarine fringe, and lacustrine fringe.) The classification is not intended to supersede or replace other wetland classification methods designed for purposes other than functional assessment.

B. Procedural Document (Smith, et al, 1995)—This document establishes the ''guiding rules'' for model development and application of the HGM Approach. Included is standard guidance for wetland bounding, characterization and assessment using a regional assessment model, as well as guidance for development of A-teams and assessment models.

C. Guidance for Establishing Reference Wetlands—Reference wetlands are used to establish a baseline from which individual wetlands are compared to assess their functional capacity. Data collected from reference wetlands is used to calibrate the regional functional assessment models. This document will provide guidance on how to identify and establish reference wetlands and determine the geographic range (reference domain) of the regional wetland subclass.

D. National Guidebooks—These documents will provide a template for each hydrogeomorphic wetland class from which regional guidebooks can be developed. National guidebooks will be established for the major classes of wetlands:

—Riverine Wetlands
—Depressional Wetlands
—Coastal and Lacustrine Fringe Wetlands
—Slope Wetlands
—Flats Wetlands—(mineral soil flats and organic soil flats)

Each document will provide the rationale and supporting literature for inclusion of selected wetland functions and variables. The document will lack field calibration and specifics on reference standards. National guidebooks will be published initially as operational drafts for a two year period, to allow the public to provide comments on the information contained within. Revisions will be made in response to field review and public comment and a final guidebook will be published.

E. Regional Guidebooks—Regional guidebooks are the tools which will be used in the field to conduct wetland functional assessments. These documents contain the regional wetland subclass models developed by the A-team, including data from reference wetlands and the calibration of the functional indices using the reference wetland data. The document will also contain an appendix of field forms to be used in conducting functional assessments for that specific regional subclass. The regional guidebook is first published as an operational draft for a two year period before it is published as a final regional guidebook. Each is described below.

1. Operational Draft Guidebook—Models drafted by the A-team for a particular wetland subclass, having been reviewed by an interagency panel and an interdisciplinary team of experts familiar with the wetland subclass and region, will be published by WES as an ''Operational Draft'' of the regional guidebook for that subclass. The preface in each operational draft will contain a statement and address for soliciting review comments. Each operational draft will be made available for public use for a two year period during which time comments and recommendations for revisions will be accepted. The operational draft will be revised to reflect recommended changes in the models and the revised models will be published as a Final Regional Guidebook two years from initial publication.

2. Final Regional Guidebooks—The revised operational drafts will be published as final regional guidebooks two years after initial publication. Each final regional guidebook will remain in use for a period not to exceed five years, during which time it will be reviewed by an interdisciplinary team to assess changes in the state of wetland science, including the applicability of new data and research on the particular wetland subclass, and to determine if revisions are needed to the regional models. If revisions are required, the final regional guidebooks will be revised and republished.

V. Application of HGM Approach

One of the primary benefits of the HGM Approach is that it provides project proponents and regulators with a method to rapidly and consistently assess the level of environmental impact of a proposed project. This information is particularly valuable within the review of Section 404 permit applications where the HGM Approach can assess the ability of a wetland to perform a specific function before and after the proposed discharge of dredged or fill material. As such, the evaluation can be useful in identifying the least damaging project alternative as required by the Section 404 program. Moreover, the method provides regulators with a more predictable tool to gauge the level of environmental impact and, therefore, to more consistently determine the appropriate regulatory response, i.e., ensure that the level of review is commensurate with the degree of environmental impact and based upon the best available scientific information.

NRCS in its administration of the Food Security Act of 1985 and the Federal Improvement and Reform Act of 1996 is tasked with determining ''minimal effects'' on conversion or proposed conversion of wetlands on agricultural lands. To aid them in this effort, NRCS will utilize the HGM Approach to determine the impacts on the hydrological and biological functions of the wetland due to the conversion/proposed conversion. ''Thresholds'' to determine the minimal effect will be established by NRCS. The information provided from an HGM assessment can then be compared to the threshold and provide the basis for making a minimal effects determination.

The HGM Approach also provides important information to determine the nature and level of compensatory mitigation that is needed to effectively offset impacts to wetlands. Identifying the degree to which a project may adversely affect the hydrologic, biogeochemical and habitat functions of a particular wetland, enables regulators to more accurately determine the amount and type of compensatory mitigation required to offset the adverse impacts. In addition, the indicators and variables used to establish the assessment model may provide performance standards with which mitigation projects can be monitored to determine compliance.

In addition to being utilized in the Section 404 regulatory program, the HGM Approach may also be applied to mitigation banking (the creation, restoration, or enhancement of wetlands) expressly for the purpose of providing compensatory mitigation for multiple projects. The HGM approach can be used to determine the appropriate number of credits available at a mitigation bank and also to establish performance standards to measure the success of the project in meeting stated goals.

The HGM Approach can be applied to determine the relative functional capacity of wetlands in a particular geographic area within a watershed planning effort, which typically involves the collection and distribution of data on the functions of wetlands in the area. The information gathered can be used to make management decisions on the location of future development within the watershed and the protection of its' aquatic resources. Where existing regional subclass models are not available, a watershed planning effort may provide the basis from which a regional assessment model can be developed. In such cases, the model can be tailored to meet a specific application of the planning effort.

The HGM Approach may also be used in the context of a States' wetland water quality standards program. The HGM Approach provides a useful framework for targeting States' data collection and research efforts. Many States have increased their efforts to monitor and document the ecological condition of their wetlands. This information is then used to define more appropriate and specific wetland water quality standards, to report on the health of States' aquatic systems, and to set performance standards for wetland restoration and mitigation projects. The indicators and variables identified in a regional guidebook can serve as the basis for establishing narrative or numeric criteria used to assess whether an established standard has been met.

VI. Schedule

Development of the HGM Approach is being accomplished in three phases. Phase I is a pilot phase which was initiated in 1995 and focused on developing functional assessment models and regional guidebooks for priority regional wetland subclasses identified by the Corps of Engineers. These priority regional subclasses are: (a.) South-Central Florida flats and depressions and flats of the Everglades; (b.) Western Kentucky and Tennessee riverine (low gradient, low order); (c.) Vernal pools in California; (d.) Prairie potholes of the northern plains states; (e.) Southeast Pine Flatwoods, and (f.) Coastal Fringe of the Texas Gulf Coast. Phase II, initiated in 1996, consists of an expanded nationwide effort to develop functional assessment models and regional guidebooks in approximately 15–20 additional regional wetland subclasses in order to acheive the goal of having a sufficient number of assessment models to address 80 percent of the Section 404 permit workload requiring functional assessments. (See Table 3) Under Phase III, which will be initiated during 1998, functional assessment models and regional guidebooks will be developed for all remaining regional wetland subclasses identified.

A. Phase I—Pilot Projects-1995

Phase I of the Action Plan was initiated in 1995 and is focused on developing regional guidebooks for regional wetland subclasses of national priority as identified by a survey sent to Corps Districts. National priorities were determined and pilot Corps Districts selected by surveying field offices and identifying those types of wetlands which, for example, are experiencing the most development pressure, are threatened due to scarcity, and/or are complex and difficult to assess. A-teams were established to identify reference wetlands and develop functional indices for these priority regional

wetland subclasses. The number of A-teams formed was dependent upon the availability of personnel, time, and financial resources, consistent with established national priorities. A training workshop was held for A-team members to ensure consistency in the efforts to develop regional subclass models. The A-teams initiated technical meetings to accomplish tasks such as: the identification of functions relevant to the particular wetland subclass, the review of existing assessment models, the selection of reference wetlands, the identification of variables, and the development and testing of functional indices. The objective of Phase I was to develop functional indices for priority regional wetland subclasses, and establish protocol for identifying reference wetlands and developing assessment models for additional regional subclasses during Phase II and Phase III in a consistent, systematic, and accurate manner.

TABLE 3.—SUMMARY INFORMATION ON REGIONAL GUIDEBOOKS AND OTHER PRODUCTS FOR PHASE I AND PHASE II OF THE ACTION PLAN

Component	Contributing agency(ies)	Product	Projected completion	Current status
National Documents				
National Action Plan	COE/WES	Technical Report	Dec 96	Draft Complete.
Procedural Document	COE/WES	Technical Report	Apr 96	Published.
Guidance for Establishing Reference Wetlands	EPA	Technical Report	Feb 97	To be initiated Jun 96.
Classification Report	COE/WES	Technical Report	Jun 93	Published.
National Guidebooks				
Riverine Wetlands	COE/WES	Operational Draft	May 96	Completed.
Depressional Wetlands	COE/WES/EPA	Operational Draft	Jan 97	To be initiated Jun 96.
Slope Wetlands	COE/WES	Operational Draft	Jan 97	Initiated Feb 96.
Fringe: Coastal	COE/WES	Operational Draft	Mar 97	Draft complete.
Fringe: Lacustrine	COE/WES	Operational Draft	Dec 97	To be initiated Nov 96.
Flats	COE/WES	Operational Draft	Dec 97	To be initiated Dec 96.
Regional Riverine Guidebooks				
Low gradient 2nd or 3rd order streams in Western KY and TN.	COE/EPA	Operational Draft	Mar 97	Workshop May 96.
Low gradient 2nd or 3rd order streams in the Northern Rockies—MT.	COE/EPA/ States.	Operational Draft	Apr 97	Workshop held in Apr 96.
Regional Depressional Guidebooks				
Prairie Potholes—ND	NRCS	Operational Draft	Feb 97	Draft completed.
Depressions in South and Central Florida	COE/WES	Operational Draft	Aug 97	Workshop held Feb 96.
Vernal Pools of the Central Valley of California	COE/WES	Operational Draft	Aug 97	Workshop held May 96.
Herbaceous Depressions of the Northern Rockies—MT.	COE/WES	Operational Draft	Mar 97	Workshop held Apr 96.
Regional Slope Guidebooks				
Forested Slope Wetlands of New England—MA, NH, VT.	COE/WES	Operational Draft	May 97	Workshop Jul 96.
Herbaceous Slope Wetlands of the Northern Rockies—MT, CO, UT.	COE/WES	Operational Draft	Dec 97	To begin Nov 96.
Regional Fringe: Coastal Guidebooks				
Coastal Wetlands of the Texas Gulf Coast	COE/WES	Operational Draft	Mar 98	To begin in FY 97.
Regional Fringe: Lacustrine Guidebooks				
None Ongoing or Planned in FY97				
Regional Flats Guidebooks				
Herbaceous Flats in South and Central FL	COE/WES	Operational Draft	May 97	Workshop held Feb 96.
Flats in the East Everglades of FL	COE/WES	Operational Draft	Aug 97	Workshop held Apr 96.
Pine Flatwoods of the Southeastern US	FHWA	Operational Draft	Sep 97	Initiated May 96.

Six regional guidebooks are currently under development representing depressional wetlands (prairie potholes in the northern plains states and vernal pools in the Central Valley of California), riverine wetlands (low gradient streams in western Kentucky/Tennessee), flats (pine flatwoods in North Carolina and flats in the East Everglades of Florida), and flat/depressional mosaics in Florida. Table 3 identifies their current status and anticipated dates of completion.

2. Phase II—Priorities for 1996 to 1998

Phase II, initiated during 1996, consists of an expanded nationwide effort to develop regional guidelines in approximately 15–20 additional regional wetland subclasses. Regional subclass models developed in Phase II will be developed under the same protocol as described for Phase I. As identified in Table 3, efforts currently underway as part of Phase II include the development of assessment models for riparian systems, herbaceous depressional and slope wetlands in the northern Rocky Mountains, forested slope wetlands in New England, and coastal fringe wetlands of the Gulf of Mexico. However, it should be recognized that expanded efforts in this Phase will not address all regional wetland subclasses. The number of efforts initiated is dependent upon the availability of personnel, time, and financial resources.

In addition to the development of regional guidebooks, the agencies will work together during Phase II to develop necessary guidance on how the HGM Approach may be applied in the review of Section 404 permit applications. The intent of this document is to clarify how information from an assessment can be used to determine the level of environmental impacts a proposed project may cause and the appropriate regulatory response.

3. Phase III—Development Beyond 1998

Based on the needs of the Federal agencies and work conducted to date by others, the agencies will establish a priority listing of additional models to be developed beginning in 1998.

VII. Funding

Primary funding for the Federal effort to develop the HGM Approach has been and will continue to be provided through the Corps, with additional support being provided by other federal agencies, including EPA, NRCS and FHWA. As development of the approach continues, limited Federal funds will be available for the development of each regional guidebook to support tasks such as the collection of data, training, and technical workshops. The cost for developing regional guidebooks is expected to vary depending on the scope of the effort and the level and nature of participation by Federal, State, Tribal and local agencies and the private sector. For State, Tribal and certain local efforts, EPA's State Wetlands Grant Program has made funding available for those agencies wishing to pursue an HGM Approach within their wetlands program. Interested State, Tribal and local agencies should contact the local EPA office for further information.

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Smith, R.D. 1993. A Conceptual Framework for Assessing the Functions of Wetlands. Wetland Research Program Technical Report WRP–DE–3?. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Smith, R.D., A. Ammann, C. Bartoldus, and M.M. Brinson. 1995. Approach for Assessing Wetland Functions Using Hydrogeomorphic Classification, Reference Wetlands, and Functional Indices. Wetland Research Program Technical Report WRP–DE–9. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Appendix A

Definition of Terms Used in the Hydrogeomorphic Approach

Assessment Model: A simple model that defines the relationship between ecosystem and landscape scale variables and functional capacity of a wetland. The model is developed and calibrated using reference wetlands from a reference domain.

Assessment Objective: The reason why an assessment of wetland functions is being conducted. Assessment objectives normally fall into one of three categories. These include: documenting existing conditions, comparing different wetlands at the same point in time (e.g. alternatives analysis), and comparing the same wetland at different points in time (e.g. impact analysis or mitigation success).

Assessment Team (A-Team): An interdisciplinary group of regional and local scientists responsible for classification of wetlands within a region, identification of reference wetlands, construction of assessment models, definition of reference standards, and calibration of assessment models.

Functional Assessment: The process by which the capacity of a wetland to perform a function is measured. This approach measures capacity using an assessment model to determine a functional capacity index.

Functional Capacity: The rate or magnitude at which a wetland ecosystem performs a function. Functional capacity is dictated by characteristics of the wetland ecosystem and the surrounding landscape, and interaction between the two.

Functional Capacity Index (FCI): An index of the capacity of a wetland to perform a function relative to other wetlands within a regional wetland subclass in a reference domain. Functional capacity indices are by definition scaled from 0.0 to 1.0. An index of 1.0 indicates the wetland performs a function at the highest sustainable functional capacity, the level equivalent to a wetland under reference standard conditions in a reference domain. An index of 0.0 indicates the wetland does not perform the function at a measurable level, and will not recover the capacity to perform the function through natural processes.

Highest Sustainable Functional Capacity: The level of functional capacity achieved across the suite of functions by a wetland under reference standard conditions in a reference domain. This approach assumes that the highest sustainable functional capacity is achieved when a wetland ecosystem and the surrounding landscape are undisturbed.

Hydrogeomorphic Wetland Class: The highest level in the hydrogeomorphic wetland classification. There are five basic hydrogeomorphic wetland classes including depressional, fringe, slope, riverine, and flat.

Project Target: The level of functioning identified for a restoration or creation project. Conditions specified for the functioning are used to judge whether a project reaches the target and is developing toward site capacity.

Project Standards: Performance criteria and/or specifications used to guide the restoration or creation activities toward the project target. Project standards should include and

specify reasonable contingency measures if the project target is not being achieved.

Red Flag Features: Features of a wetland or the surrounding landscape to which special recognition or protection is assigned on the basis of objective criteria. The recognition or protection may occur at a federal, state, regional, or local level, and may be official or unofficial.

Reference Domain: The geographic area from which reference wetlands are selected. A reference domain may or may not include the entire geographic area in which a regional wetland subclass occurs.

Reference Standard Sites: The sites within a reference wetland data set from which reference standards are developed. Among all reference wetlands, reference standard sites are judged by an interdisciplinary team to have the highest level of functioning.

Reference Standards: Conditions exhibited by a group of reference wetlands that correspond to the highest level of functioning (highest, sustainable level of functioning) across the suite of functions performed by the regional wetland subclass. The highest level of functional capacity is assigned an index score of 1.0 by definition.

Reference Wetlands: Wetland sites that encompass the variability of a regional wetland subclass in a reference domain. Reference wetlands are used to establish the range of conditions for construction and calibration of functional indices and establish reference standards.

Regional Wetland Subclass: Wetlands within a region that are similar based on hydrogeomorphic classification factors. There may be more than one regional wetland subclass identified within each hydrogeomorphic wetland class depending on the diversity of wetlands in a region, and assessment objectives.

Site Potential: The highest level of functioning possible, given local constraints of disturbance history, land use, or other factors. Site capacity may be equal to or less than levels of functioning established by reference standards for the reference domain, and it may be equal to or less than the functional capacity of a wetland ecosystem.

Wetland Functions: The normal activities or actions that occur in wetland ecosystems, or simply, the things that wetlands do. Wetland functions result directly from the characteristics of a wetland ecosystem and the surrounding landscape, and their interaction.

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BILLING CODE 3710–92–U

DEPARTMENT OF ENERGY

[FE Docket Nos. 96–45–NG, 96–44–NG, 96–46–NG, 96–41–NG, 96–47–NG, 96–48–NG, 96–26–NG, 96–49–NG, and 96–51–NG]

Coastal Gas Marketing Company; Northstar Energy, Inc.; Mock Energy Services, LP; Arco Products Company, Division of Atlantic Richfield Company; Producers Energy Marketing, LLC; Producers Energy Marketing, LLC; St. Lawrence Gas Company, Inc.; Coenergy Trading Company; Orders Granting Authorization To Import and/or Export Natural Gas

AGENCY: Office of Fossil Energy, DOE.

ACTION: Notice of orders.

SUMMARY: The Office of Fossil Energy of the Department of Energy gives notice that it has issued Orders authorizing various imports and/or exports of natural gas. These Orders are summarized in the attached Appendix.

These Orders are available for inspection and copying in the Office of Fuels Programs Docket Room, 3–F056, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–9478. The Docket Room is open between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

Issued in Washington, DC, on August 2, 1996.

Clifford P. Tomaszewski,

Director, Office of Natural Gas, Office of Fuels Programs, Office of Fossil Energy.

APPENDIX—IMPORT/EXPORT AUTHORIZATIONS GRANTED

DOE/FE Authority Order No.	Date issued	Importer/exporter FE docket No.	Import volume	Export volume	Comments
1183	07/10/96	Coastal Gas Marketing Company (96–45–NG).	600 Bcf/term	150 Bcf/term	Blanket for 2 years from and to Canada and Mexico.
1184	07/12/96	Northstar Energy, Inc. (96–44–NG)	7.4 Bcf/term	.....	Blanket for 2 years to Canada.
1185	07/12/96	Mock Energy Services, LP (96–46–NG).	100 Bcf/term	100 Bcf/term	Blanket for 2 years from and to Canada.
1187	07/22/96	ARCO Products Company, Division of Atlantic Richfield Company (96–41–NG).	25 Bcf/term	.....	Blanket for 2 years from Canada.
1188	07/25/96	Producers Energy Marketing, LLC (96–47–NG).	365 Bcf/term (Combined total).	(*See* import)	Blanket for 2 years from and to Mexico.
1189	07/25/96	Producers Energy Marketing, LLC (96–48–NG).	365 Bcf/term (Combined total).	(*See* import)	Blanket for 2 years from and to Canada.
1190	07/26/96	St. Lawrence Gas Company, Inc. (96–26–NG).	20,275 Mcf/per day.	.....	Long-term for 10 years retroactive to 11/1/92.
1191	07/26/96	AEC West Ltd. (96–49–NG)	200 Bcf/term	.....	Blanket for 2 years from Canada.
1192	07/26/96	CoEnergy Trading Company (96–51–NG).	150 Bcf/term	.....	Blanket for 2 years from Canada.