

Please note that this guidance is subject to revision without notice/ 16
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This guidance is intended to be flexible; it is the decision of the project manager and their supervisor whether any condition is appropriate for a particular wetland construction project.

BRANCH GUIDANCE FOR WETLANDS COMPENSATION PERMIT CONDITIONS AND PERFORMANCE CRITERIA

Required Information for Site Design Plans

1. *Specific goals and objectives*, in terms of functions and values (*i.e. education/research, erosion control, fisheries/wildlife habitat, flood conveyance/flood storage, food production, timber, open space/aesthetics, recreation, rare or threatened and endangered species, timber production, water quality, water supply*), expressed as acres of wetlands, vegetation type, wetland classes (*Cowardin classification*), buffers (*to provide habitat, to filter sediments, and to protect the mitigation site from adjacent development; Buffers should provide a gentle transition between the mitigation site and adjoining lands*), specific functions that are measurable, and structures to implement the functions.

(Project goals should include replacement of functions and values lost by the permitted wetland impact and establishment of a persistent, self maintaining system.

A mitigation site cannot provide the range of possible functions or values. Some functions are incompatible. For instance, if the objective is wildlife habitat or maintenance of threatened and endangered species, then it maybe inappropriate to route stormwater into the mitigation site. The additional inputs of sediments, nutrients, metals, and hydrocarbons may not be compatible with the primary objectives.

References: Clewell & Lea 1990, Eggers 1992, Haering et. al. 1992, Munro 1991, USACE New England District Regulatory Branch 1999, SCS 1992)

2. Location map

3. Water budget based on expected monthly inputs and outputs, including a hydrograph showing monthly changes in water level. The water budget will include numeric calculations (on a monthly basis) of the following hydrology inputs and outputs relative to the wetland system, and will project the resulting water level elevations for ~~both~~ a 'typical' year, a 'wet' year and a 'dry' year:

Inputs: Precipitation
 Infiltration
 Direct surface flow runoff

Overbank flooding

Outputs: Evapotranspiration
 Exfiltration
 Spillway outflow

References should be provided for all data sources and assumptions based upon site specific characteristics such as soil permeability.

(A modification to the water budget model detailed in Pierce 1993 prepared by Tom Westbrook in 1994 and often utilized by Norfolk District has been shown to under predict potential water storage. A wetland design based on this modified Pierce model may be more likely to maintain wet conditions due to the conservative estimates of potential water storage within the planned wetland - Fomchenko 1998

Be wary about planned wetlands that would be supported by groundwater discharge because of the difficulty in calculating the size of the groundwater watershed and thus the amount of groundwater discharge - Garbisch 1994)

4. Conceptual grading plan

(Drawings should include plan view and cross sections. The plan should specify expected seasonal depth, duration, and timing of inundation/saturation for each habitat type or hydrologic zone in the mitigation site. The plan should also include a summary of hydrologic calculations and indicate whether the hydrology of the planned wetland is driven by groundwater or surface water. - Garbisch 1994, USACE New England District Regulatory Branch 1999)

5. Plant species list and planting scheme

(The proposed plant list and planting scheme depends on project goals and objectives - timber production, wildlife habitat, etc.; the size and configuration of mitigation site - small and narrow versus large and more than 300 feet wide; and the planned hydrologic regime.

When working with slow growing species like oaks or hickories, forest establishment may be accelerated through the use of nurse species or trainers like loblolly pine, black willow, alder, wax myrtle, sycamore, or cottonwood. These nurse trees shade competing vegetation like allelopathic turf grasses (bermuda grass and fescue), add organic matter to the soil, often fix atmospheric nitrogen, and increase structural complexity. In some cases, nurse crops can create a scrub-shrub stage community within 3 years and a closed canopy within 10 years. This strategy promotes rapid colonization by birds and may enhance public perception of mitigation sites.

There are a number of different ways to plant a planned forested mitigation area: natural regeneration; direct seeding; bare root seedlings; cuttings; container stock; ball and burlap plantings; inoculants; .

Natural regeneration may be appropriate when:

1) *The site is narrow (no more than 2 tree heights or less than 100 yards from the seed source);*

2) The site is exposed to flood waters bearing seeds (i.e. overbank flooding);

3) The original soils and hydrology have been little altered;

Direct seeding may be used to establish both heavy mast (oaks and hickories) and light seeded species (maple, sweet gum, ash, elm).

For example, oaks and hickories have been established on extensive areas of seasonally saturated soils through direct seeding. If the site has been cultivated for a long time, it should be disked at least twice in the late summer prior to planting in order to break up any plow pan or compacted soil and to reduce herbaceous and woody competition. Disk preferably to a depth of 8-15ö. Acorns should be planted at a depth of 1-6 inches anytime from late fall until late April. Acorns can be planted by hand or using a modified 1 or 2 row bean planter. A conservative germination rate of 35% can be expected. At that rate, planting 1000-1500 acorns/acre would result in 300-500 seedlings/acre. Plant more acorns if competition is expected.

When authorizing seeding specify:

- quantities of pure live seed (including numbers of acorns per acre);
- the seeding window (dates for seeding);
- use of filler (such as sand) to dilute small or light seeds for uniform coverage;
- seeding technique including equipment and implements;

Bare root seedlings: If the objective is timber production, that is to maximize production of stems with small crowns then seedling densities of 300-500/acre are adequate. For wildlife purposes, the objectives are development of broad crowned trees capable of greater mast production, gaps between trees allowing for growth/development of understory species and invasion of lighter-seeded trees (sweet gum, sycamore, maple, ash, and elm), and horizontal and vertical structural complexity. For these purposes, seedlings (oaks, ashes, hickories, and sweet gum) may be successfully planted or established at a density of 110-300/acre.

References - Clewell & Lea 1990, Garbisch 1994; Kennedy 1993, McKevlin 1992, NRCS 2000, Schweitzer 1998, Stanturf et al. 1998, Twedt et al 1997, Virginia Department of Forestry 1993

Cuttings may be used to establish fast growing early successional species like willows, cottonwood, and alder (Clewell & Lea 1990).

Container stock can be planted later in the season than bare root seedlings. Container stock, and balled and burlap plantings have higher survival rates in heavy clay soils than bare root seedlings. Container stock is also more tolerant of long duration saturation or inundation than bare root seedlings. Do not specify wet-acclimated plant materials. Such materials are expensive to obtain, are grown under stress, have less well-developed roots, and may be at a competitive disadvantage (Garbisch 1993, 1994, and 1995, McIninch et al. 1994, Stanturf et al. 1998)

Understory development: Establishment of a wetland understory is often overlooked in mitigation. In one riverine forest, undergrowth made up 91% of the species. This understory diversity can be increased through:

- transplanting trees and shrubs from areas that will be filled or cleared;
- use of nursery stock (at a rate of 10 species/acre)
- addition of topsoil from a donor site;
- transplanting blocks of topsoil from areas that will be impacted to the mitigation site.

(Clewell & Lea 1990, Garbisch 1995, Munro 1991)

6. Soil preparation and amendments - When preparation of the site entails grading, the site should be over excavated 6-12 inches and a comparable amount of high quality topsoil, organic soil, muck, or composted organics added. This material will provide a rooting medium and a source of organic material for the microbial activity necessary to establish a reducing environment.

Seedbank studies should be conducted on donor soils, particularly soils from other wetlands, to ensure that invasive species are not introduced.

Any soils that will be exposed to the atmosphere may need to be tested for sulfides or pyritic sulfur. Oxidation of sulfides can result in acidification of mitigation sites, inhibiting plant establishment.

Soil compaction should be reduced by ripping or chisel-plowing mitigation site soils and subsoils.

A supply of coarse woody debris (logs, stumps) should cover at least 1% of the mitigation site. This material will provide wildlife cover, introduce a source of organics, act as nurseries for some plant species, inoculate the site with some plant propagules and invertebrates.

References - Cummings 1999, Eggers 1992, Garbisch 1994, Haering et al 1992, USACE New England District Regulatory Branch 1999

7. Surrounding land use/plans, including probable future land use (Consider landscape features or public issues that may control or influence design. Consider the effect of the mitigation site on roads, right-of-ways, and utilities. Consider the effect of the mitigation site on drainage both upstream and downstream of the site.

References - Eggers 1992, USACE New England District Regulatory Branch 1999, SCS 1992)

8. Abatement/control plan for undesirable plant and animal species

(This may include control of competing vegetation such as volunteering herbaceous and woody species. Weed control (mowing, discing, or use of herbicides) may increase survival and speed early growth of oaks, but may make no difference in growth or survival after 15 years. Mowing and discing does increase growth of sweetgum, green ash, and sycamore by 10-20% after 5 years.

References - Garbisch 1995, Stanturf et al. 1998)

9. A construction time table must be provided in the plans and specification. This time table shall identify those elements critical to project success.

References Eggers 1992, Garbisch 1993

10. Any reference wetland areas that can be used as a model for proposed hydrologic regime, vegetation composition and structure guide monitoring and evaluate success.

References Eggers 1992, Munro 1991, USACE New England District Regulatory Branch 1999

Permit Conditions for Wetlands Compensation

1. An as-built survey with 6" elevation contours and invert elevations for all water elevation control structures and spot elevations on berm crest - (Spot elevations throughout the site may be adequate in some cases). This survey shall be prepared by a licensed surveyor and shall be certified by the licensed surveyor or by a registered professional engineer to be in conformance with the design plans and specifications. This submission shall be a requirement prior to release of the site for seeding and prior to release of that portion of the performance bond allocated to design and excavation costs. Surveys and submission of surveys to the Corps should be done within no more than seven days of grading. Following acceptance by the Corps of the as-built grading plan, the site must immediately be seeded with an approved wetland seed mix to stabilize the site and to minimize invasion of undesirable species. (NOTE: For larger sites, this will require that grading, surveying, submittal to the Corps, and seeding is occurring on a concurrent basis across the site. In addition, the project managers might require pre-planting and/or post-grading conferences with the appropriate contractors).

2. Unless given written approval by the Corps, the applicant will not plant the compensation site before the completion of the first three months of the region's growing season following grading. The applicant will submit hydrological information for those three months for the Corps' evaluation (using groundwater wells constructed and installed by a plan accepted by the Corps). That information will be keyed to a site plan such that hydrologic conditions across the site can be evaluated, and appropriate vegetation can be selected which is compatible with the projected water elevations and duration. Following evaluation of the hydrologic information, the Corps may require waiting through an additional spring growing season in order to ascertain whether hydrology is sufficient to meet the site's goals. ***(This condition is critical. Failure to comply with this permit condition has resulted in increased costs to the applicant [plants and planting] associated with correcting the site's hydrologic regime or in a less successful mitigation site [usually drier than planned and thus nonjurisdictional].***

3. Following planting, permittee must submit to the Corps a site plan depicting actual plant zonation and a narrative documenting reasons for any changes from the approved final design.

4. The permittee will post a performance bond (Examples on Page 5) in favor of the United States Army Corps of Engineers, secured by irrevocable bank

letter of credit or licensed corporate surety, in the amount of (\$\$) conditioned on performance of required compensation and all required monitoring (**authorized under 33 CFR 325.4(d)**). The performance bond must be received by this office within 60 days of the issuance of the permit or prior to the commencement of any work associated with an enforcement action.

5. A real estate instrument will be recorded in the chain of title to the subject property which will require the preservation of wetlands on the property in their natural condition in perpetuity except for the work permitted herein. This instrument must be approved by the Corps prior to recordation and proof of its recordation submitted to the Corps within 60 (sixty) days of the date of this **permit / nationwide permit verification**. See attached example of Restrictive Covenant. To facilitate the preparation of this instrument, we recommend that your attorney contact Ms. ~~Dawn Phillips~~ **Katherine Will** of the Norfolk District Office of Counsel at **757/441-7710**.

6. The site shall meet the following performance criteria (These criteria would probably vary from year 1 to year ~~5~~ **10**, and those variations should be specified in this condition of the permit):

a. Hydrology: **At a minimum**, meet the hydrology criteria for a wetland under the currently used Federal Delineation Manual. In 1994: Saturation, to the surface, of the soil substrate for a duration equal to a minimum of 12.5% of the growing season. For the design, the normal growing season shall be from _____ to _____, or a total of _____ days, indicating a minimum saturation to the surface of _____ days during the growing season. (Blanks should be filled in based on regional conditions). (This condition should be made project specific. For example, if the design is for a permanently flooded shallow water emergent pond, then the performance criterion might be 'At a minimum, the water table shall occur at the ground surface throughout the year except for July and August.' For wetlands which are expected to be forested at maturity, consideration should be given to ultimate drawdown of the water table in establishing the performance criteria.)

b. Vegetation: The following criteria can be altered based on a rationale submitted by the permittee and accepted by the Corps.

i. Woody Plants: ~~At least~~ **More than** 50% of all woody plants, expressed either by plant stems or canopy coverage shall be facultative (FAC) or wetter (FACW or OBL). A minimum plant stem count of **200-400/acre** must be achieved in sample plots until the canopy cover is thirty percent (30%) or greater. (NOTE: On 15-foot centers, woody plants equal approximately 200/acre).

ii. Herbaceous Plants: ~~At least~~ **More than** 50% of all herbaceous plants shall be facultative (FAC) or wetter (FACW or OBL). Aerial coverage shall be a minimum of 50% in emergent wetland areas. Shrub/scrub or sapling/forest vegetation is not included in coverage or stem count for herbaceous vegetation.

c. Other. The Corps may, at any time during the five year monitoring period (**10 years for forested wetland creation**), require removal, treatment or management of undesirable plant or animal species, including physical removal, use of herbicides, live trapping, confining wires or nets, etc.

7. Should the performance criteria outlined in Condition 6 not be met at any time during the five-year (**10 year**) monitoring period, (a shorter time period for monitoring may be appropriate for emergent vegetation) the permittee must provide the Corps with their proposal detailing corrective actions and/or maintenance actions proposed and an implementation schedule for said actions, planned to meet the criteria. Upon review and approval/modification of said corrective measures by the Corps, the permittee shall implement the necessary corrective measures. Upon completion of said action, a written summary of the work shall be supplied to the Corps. The Corps may require additional remedial actions if actions by the permittee do not result in satisfaction of performance criteria during the next subsequent growing season. Should the permittee fail to take corrective action, the Corps will use the performance bond to fund correction of site problems.

8. Monitoring reports are required. See Special Conditions for Compensation Site Monitoring. Monitoring reports should show that minimum requirements of special conditions and project plan have been met. These reports should be received by the Corps no later than October 15 of the monitoring year.

9. A pre-construction meeting between the Corps project manager, the contractor/sub-contractors, and equipment operators responsible for mitigation site preparation shall be held. The purpose of this meeting is to review the mitigation plans, including staging of site preparation, identify areas to be avoided, handling of top soil, etc.

10. The permittee will schedule a post-construction meeting to be attended by the Corps project manager while construction equipment is still on the mitigation site. Any difficulties in construction will be identified during this meeting. Any apparent problems will be corrected following the meeting.

11. A professional wetland scientist, hired at the permittee's expense must conduct daily inspections of the mitigation site during construction to ensure that construction complies with plan design. Any deviations in the plan shall be coordinated with and approved by the Corps project manager prior to implementation.

12. The permittee shall assume all liability for accomplishing corrective work should the District Engineer determine that the compensatory mitigation has not been completed satisfactorily. Remedial work may include regrading and/or replanting the mitigation site. This responsibility shall extend for a period of 5 years beginning upon completion of mitigation site construction.

13. The permittee shall define a reference wetland to be used for monitoring the success or failure of the mitigation plan. The reference wetland shall be approved by the District Engineer (or shall be waived by the DE) and shall not be subject to any alterations during the ___ year monitoring period. Baseline data concerning vegetation, soils, and hydrology shall be provided to the District Engineer.

14. A post-construction assessment of the condition of the mitigation site shall be performed after the first 5 full growing seasons following completion of mitigation site construction. To ensure an objective evaluation, the person(s) that prepared the annual monitoring reports shall not perform this

assessment without written approval of the Corps. The assessment must include:

- 1) Summary of the original or modified mitigation goals and a discussion of the level of goal attainment.
- 2) An assessment (quantitative or qualitative) of functions and values performed by the site.
- 3) A calculation of the area of wetlands on site using the Corps 1987 Wetland Manual; a scale drawing of wetland boundaries; and supporting data sheets.
- 4) A comparison of the area and extent of delineated wetlands to the area and extent of wetlands proposed in the mitigation plan.
- 5) Photographs of the mitigation site taken from the same locations as the monitoring photographs.
- 6) A description of any significant problems and any solutions during construction and monitoring of the mitigation site.
- 7) Identification of agency policies and procedures that encumbered implementation of the mitigation plan. Note should be made of any policies or procedures that contributed to less success or effectiveness than anticipated.
- 8) Recommendations of measures to improve efficiency, reduce cost, or improve effectiveness of future projects.

Special Conditions for Compensation Site Monitoring

1. Reports shall be required for the first five years following the end of the first growing season after planting for herbaceous wetlands. **For planned forested wetlands, reports shall be required for five of the first ten years following the end of the first growing season after planting.**
2. Reports will be prepared between ~~July 1 and September 30~~ **October 1 and December 30** (although hydrologic data will be collected during the early growing season). The report will indicate dates at which all information in the report was collected.
3. Each report shall include:
 - a. Wetland boundary plotted on site plan based on results of hydrology and vegetation data, and calculation of total wetland acreage based on that boundary.
 - b. ~~35mm slides~~ **Photographs** showing a view of the wetland area taken from fixed-point stations from a height of approximately five to six feet from at least one location per acre. Permanent markers shall be established to

ensure that the same locations (and view directions) on the site are monitored in each monitoring period.

c. Hydrologic information, including both raw data and hydrograph established using that data **for the mitigation and reference area(s)**.

i. Groundwater data (The permittee's plans for well design and installation **shall be consistent with Corps guidance and** must be accepted by the Corps prior to installation):

- A minimum of one (1) well per acre for sites five acres or less shall be installed. For larger sites, the Corps project manager will determine the appropriate number. Monitoring wells should be calibrated against test pits.

- The wells will be monitored weekly for ten consecutive weeks beginning at the initiation of the region's growing season (see Condition 5a above for definition of growing season for the region). For sites designed to be seasonally or temporarily saturated, at least one full year of monthly data (taken every two weeks except for the first ten weeks of the growing season) is required.

ii. Surface water depths observed during well monitoring will be reported.

d. Vegetation data **for the mitigation and reference area(s)**.

i. For woody plants, density counts by species are recommended. Sample plots shall be selected randomly at a ratio of 5 plots per acre of constructed wetland area. Plot size will have a 30-foot radius or be 20 feet by 20 feet square. Transects or other accepted methodologies (**such as line intercept methods**) can be used in lieu of plots.

Specify survival of planted materials in each field or cell in the mitigation site. Describe each species in terms of health and vigor of surviving plantings. What is the prognosis for survival? Diagnose (if possible) the cause(s) of mortality.

ii. For herbaceous plants, measurements of percent cover are recommended. Sample plots shall be selected randomly at a ratio of 20 plots per acre of constructed wetland area. Plot size will have an 18-inch radius or be 40 inches by 40 inches square. Transects or other accepted methodologies (**such as line intercept methods**) can be used in lieu of plots.

Specify survival of planted materials in each field or cell in the mitigation site. Describe each species in terms of health and vigor of surviving plantings. What is the prognosis for survival? Diagnose (if possible) the cause(s) of mortality.

iii. Identify zone(s) where each sample plot is located.

e. **Soil data for the mitigation and reference area(s). This is necessary for mitigation sites where wetlands are to be created. At a minimum, within 30 feet of each well site, the soil shall be profiled and classified as hydric**

or not using both the Corps 1987 Wetland Manual and the Field Indicators of Hydric Soils.

f. Identify any invasion by undesirable species such as phragmites, purple loosestrife, cattails, reed canary grass, fescue or animal species such as geese, deer, and beavers. Quantify extent of invasion of undesirable plants by either stem counts or percent cover, whichever is appropriate. Describe and/or quantify damage done by animal species. **Specify percent cover of invasive species for each field or cell in the mitigation site.**

g. Wildlife observations, recording actual use of wildlife. For casual observations, record the date of observation, number of individuals, presence of juveniles, and use of the site for each animal observation.

h. Describe remedial actions conducted since the last monitoring report (modification, relocation of water control structures, control of invasives, grading, soil amendments, additional planting).

EXAMPLES OF PERFORMANCE BOND:

EXAMPLE #1: Require a Bond Estimate as part of the plans (simple example - more detail needed for real project);

ITEM	AMOUNT
Design	25,000
Earthwork	500,000
Planting	150,000
Monitoring	25,000
Subtotal	700,000
Contingency (20%)	140,000
COE Admin. (10%)	<u>70,000</u>
Total Bond	\$910,000

Scenario #1: If applicant impacts wetlands prior to mitigation design and construction, applicant posts bond of \$910,000 with requirement to commence grading prior to ____ years after bond posting (otherwise he loses bond).

Scenario #2: If applicant constructs earthwork and submits certified survey, bond is reduced by \$525,000 (i.e., Design & Earthwork), for a bond amount of \$385,000.

Scenario #3: Mitigation was built and monitored for three years (all successful). Thus the bond amount is now reduced to 2/5ths of the monitoring, contingency and COE administration costs (40% x \$235,000) or \$94,000.

EXAMPLE #2:

Minimal Requirements:

Design

Limits of Disturbance and Survey, and Groundwater Well Installation

Sediment Control

Grading and Soil Amendments (if not backfilled with organic topsoil)

Regrading Contingency Cost (+ 30% Original Grading Cost)

Planting Costs

Replanting Costs (+30% Original Grading Cost)

As Built Survey

Environmental Consultant Supervision and Monitoring (5 years)

Land Acquisition and/or Conservation Easement Acquisition Cost (If not already acquired by the applicant)

Corps Administrative Costs (10% of the Total Estimated Costs)

EXAMPLE OF DECLARATION OF RESTRICTIVE COVENANT:

DECLARATION OF RESTRICTIONS

OF

_____, VIRGINIA

THIS DECLARATION OF RESTRICTIONS, made this ____day of _____, 199_, by _____, Owner.

WHEREAS, [_____] is the owner of the property shown on Schedule "A" attached hereto and more specifically described as:

BRIEF LEGAL DESCRIPTION

on which is located [----- subdivision],

WHEREAS, [_____] desires to impose on said property a restrictive covenant expressing [_____] 's intent to preserve said property in perpetuity in its natural state, by prohibiting wetland destruction or alterations, building construction, addition of fill material, cultivation, pruning, or tree harvesting in the area designated as "Wetlands, subject to restrictive covenant" on Schedule "A":

NOW THEREFORE THIS DECLARATION WITNESSETH: [_____] does hereby declare, covenant and agree, for itself and its successors and assigns, that said property shall be hereafter held and sold subject to the following conditions and restrictions, to-wit:

The property described as "Wetlands, subject to restrictive covenant" on Schedule "A" attached hereto shall be preserved in perpetuity in its natural state, by prohibiting wetland destruction or alterations, building construction, addition of fill material, cultivation, pruning, tree harvesting, hunting and trapping in the area designated as "Wetlands, subject to restrictive covenant" on Schedule A. Additionally, the following activities shall be prohibited on the property designated as "Wetlands, subject to restrictive covenant" on Schedule A:

1. Destruction or alteration of wetlands on the property other than those alterations authorized by the Norfolk District, U.S. Army Corps of Engineers (USACE) under permit number 92-_____-____;
2. Construction or maintenance of buildings, mobile homes, fences, signs other than those which currently exist; however, boardwalks, wildlife management structures, and observation decks may be placed in the wetlands provided that any such structure permits the natural

movement of water and preserves the natural contour of the ground and subject to prior approval by the Norfolk District, U.S. Army Corps of Engineers (USACE);

3. Ditching, draining, diking, damming, filling, excavating, plowing, mining or drilling, removal of topsoil, sand, or other materials, and any building of roads or alteration in the topography of the land in any manner except for maintenance of existing foot trails;

4. Removal, destruction, and cutting of trees or plants (except as necessary to to construct or maintain foot trails or for safety), planting of trees and plants, use of fertilizers, and spraying with biocides;

5. Dumping of ashes, trash, garbage, or other unsightly or offensive material, and changing of the topography through the placing of soil or other substance or material such as land fill or dredged material; nor shall such activities be conducted on the protected property or adjacent property which could cause erosion or siltation on the protected property;

6. Trapping, hunting, cultivating, harvesting, and logging.

7. The covenants contained herein shall not hereafter be altered in any respect without the express written approval and consent of the Owner or its successor in interest and the Norfolk District, U.S. Army Corps of Engineers; the covenant contained herein runs only to the benefit of the United States through the Corps of Engineers, and the joinder of any other party or entity other than the Owner or its successor in interest and the Norfolk District, U.S. Army Corps of Engineers shall not be required to amend or vacate this Declaration.

8. The provisions hereof shall be deemed individual and severable and the invalidity or partial invalidity or unenforceability of any one provision or any portion thereof shall not affect the validity or enforceability of any other provision thereof.

9. The provisions hereof shall be enforceable by any proceeding at law or in equity by the United States Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, or any owner of a lot within the [-----] subdivision or any non-profit corporation or entity whose primary purpose is environmental protection or preservation. Failure by any agency or owner to enforce any covenant or restriction contained herein shall in no event be deemed a waiver of the right to do so thereafter.

These covenants are to run with the land and shall be binding on all parties and persons claiming under them.

WITNESS the following signature the day and year first above written.

[_____]

BY: Its General Partner

BY: _____

TITLE: _____

State of Virginia, City of _____, to wit:

I, _____, a notary public for the state and city aforesaid, do certify that [Name] [Title] whose name was signed on _____, 1993 in his capacity on that date to the foregoing document has acknowledged said document and signature before me in the city aforesaid.

Given under my hand and notarial seal this _____ day of _____, 1993.

Notary Public

My commission expires _____

SCHEDULE A

[Brief legal description of property], such parcels comprising the (----
----- subdivision), all as shown on the Plat of Easements and
Restrictions dated [_____] and denoted as "Wetlands, Subject to
Restrictive Covenant", prepared by _____, Engineers, Surveyors,
and Planners, _____, Virginia, an annotated copy of which is
attached and made a part hereof.

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