

DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17**

RIN 1018-AB31

Endangered and Threatened Wildlife and Plants; Threatened Status Determined for *Spiraea virginiana* (Virginia Spiraea)**AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Final rule.

SUMMARY: The Service determines *Spiraea virginiana* (Virginia spiraea) to be a threatened species and thereby provides the species needed protection under the authority contained in the Endangered Species Act of 1973, as amended. Twenty-four populations are recorded from West Virginia south to Georgia. Although the species is widespread geographically, it is restricted to a narrow ecological niche and occurs in small to moderate populations at most locations. Growing along scoured banks of high gradient streams or braided features of lower reaches, *Spiraea virginiana* is presently known from 24 stream systems in 6 States. An additional six historic records are presumed to be extirpated. A combination of factors contributes to the rarity of the species, including a very narrowly defined habitat niche that is subject to scouring and flooding, an apparent lack of successful sexual reproduction, limited opportunities for colonization, and competition from other species. Threats to the species include human disturbance at several site locations and two proposed hydroelectric facilities. Unsuccessful seed germination tests and the lack of seedlings at any location suggest that only one genotype is present at each location. Critical habitat has not been determined.

EFFECTIVE DATE: July 16, 1990.

ADDRESSES: The complete file for this rule is available for inspection, by appointment, during normal business hours at the Regional Office, One Gateway Center, Newton Corner, Massachusetts 02158.

FOR FURTHER INFORMATION CONTACT: Sharon W. Morgan, Fish and Wildlife Biologist (see **ADDRESSES** section) (617-965-5100 ext. 382 or FTS 829-9382).

SUPPLEMENTARY INFORMATION:**Background**

Spiraea virginiana Britt. was described from a specimen collected by

C.F. Millsbaugh on June 20, 1890, along the Monongahela River in Monongalia County, West Virginia (Clarkson 1959, Glencoe 1961). The original description also noted an 1878 collection from the mountains of North Carolina made by G.R. Vasey (Britton 1890).

Later studies of the Virginia spiraea described in variations in leaf size, shape and degree of serration, resulting in the publication of variety *serrulata* (Rehder 1920), which was later reduced to form *serrulata* (Rehder 1949). Clarkson (1959) referred some specimens to *S. corymbosa* Raf. (= *S. betulifolia* Pallas) although Glencoe (1961) included these specimens in his concept of *S. virginiana*, noting that the species was extremely variable. After visiting many populations throughout the range of the species, Ogle has concluded that *S. virginiana* is a distinct species and is easily distinguished from *S. corymbosa* on the basis of plant height, branching patterns, inflorescence size, and leaf morphology (D. Ogle, Virginia Highlands Community College, pers. comm. 1988.). More important differences are the distinct habitat preferences of the two species and the non-overlapping geographic (allopatric) ranges (Ogle, pers. comm. 1988).

Virginia spiraea is a shrub in the rose family that grows from two to ten feet tall, with arching and upright stems. The species is a prolific sprouter and forms dense clumps that spread in rock crevices and around boulders. Leaves are alternate and quite variable in size, shape and degree of serration. Cream-colored flowers occur in branched, flat-topped inflorescences approximately four to eight inches wide. Plants flower during June and July.

S. virginiana is found in a narrowly defined habitat. It occurs along scoured banks of high gradient streams, or on meander scrolls, point bars, natural levees, or braided features of lower reaches. Scour must be sufficient to prevent canopy closure, but not extreme enough to completely remove small, woody species. Plants are most vigorous in full sun, but can tolerate some shading until released from competition (primarily from trees, large shrubs or vines). They occur within the maximum floodplain, usually at the water's edge with a variety of other disturbance-prone species (Ogle, pers. comm. 1988).

Presently, *S. virginiana* is known from 24 locations on 23 stream systems in 6 States. Six additional sites have not been relocated and are presumed to be extirpated. In Georgia, populations occur on Rock Creek in Walker County and Bear Creek in Dade County. The North Carolina sites are found on the South Fork of the New River in Ashe

County, the Little Tennessee River in Macon County, the Nolichucky River in Mitchell and Yancey Counties (extending downstream into Unicoi County, Tennessee), the South Toe River in Yancey County, and the Cane River in Yancey County. The species is known from additional sites in Tennessee along Abrams Creek and the Little River in Blount County, Cane Creek in Van Buren County, White Oak Creek in Scott County, Clifty Creek in Roane County, Daddy's Creek in Cumberland County, and Clear Fork in Morgan and Scott Counties. The Virginia populations are found on the Russell Fork and Pound Rivers in Dickenson County, the New River in Grayson County, and the Guest River in Wise County. West Virginia records occur on the Bluestone River in Mercer County, the Buckhannon River in Upshur County, in a shrub-dominated wet meadow in Raleigh County, and along the Gauley and Meadow Rivers in Nicholas and Fayette Counties. Populations in Kentucky occur along the Rockcastle River in Pulaski County and Sinking Creek in Laurel County.

Historic collections are known from North Carolina (Graham and Buncombe Counties), Tennessee (Blount County), West Virginia (Fayette and Monongalia Counties) and Pennsylvania (Fayette County).

Since the species is found sporadically scattered along streams and rivers, it is difficult to delineate the exact boundaries of discrete populations. All of the populations listed above occur within a five to six mile section of river; however, most populations are not scattered and only occur along a half mile or less of streambank.

Population estimates are based on the number of clumps recorded during field visits. Of the 24 known sites, 13 are small populations (less than 10 clumps), 8 are moderate in size (from 10 to 50 clumps) and only 3 are abundant (greater than 50 clumps).

Populations occur in a variety of Federal and State ownerships. Many are also found on private property, and since populations occur along rivers, several sites involve more than one landowner. Federal ownership includes the Jefferson National Forest (Virginia), the Cherokee National Forest (Tennessee), the Daniel Boone National Forest (Kentucky), Great Smoky Mountains National Park (Tennessee), Big South Fork National River and Recreation Area (Tennessee—Corps of Engineers and National Park Service) and John Flannagan Dam (Virginia—Corps of Engineers). Populations are found in four State parks in Georgia, Tennessee, Virginia and West Virginia.

Presently, three sites are voluntarily protected by private landowners contacted by The Nature Conservancy or State heritage programs. One historically known site has been eliminated by dam construction (population on the Monongahela River in West Virginia). Other historically known populations have not been relocated and are assumed extirpated (six sites in North Carolina, Tennessee, West Virginia and Pennsylvania).

The Virginia spiraea is a rare species due to a combination of factors, and biological circumstances as well as documented and potential human disturbance threaten many populations. The species occurs in a constantly fluctuating environment and requires disturbance for successful colonization, establishment and maintenance; however, too much scouring and/or flooding could eliminate populations entirely (Ogle, pers. comm. 1988). Field observations have documented a lack of or a significant reduction in seed production (many populations show aborted seeds), and germination tests have produced low germination rates. These observations suggest that only one genotype (genetic characteristics) may be present at each location. Opportunities for colonization of new sites are probably very limited and dependent upon a unique combination of biological and environmental conditions (Ogle, pers. comm. 1988). Competition by both native and introduced species adversely affects populations. Additionally, many populations are threatened by a range of human activities. A proposed hydroelectric facility at Summersville Dam on the Gauley River in West Virginia is located immediately upstream from one of the largest known populations, and long range plans include a hydroelectric generating facility at John Flannagan Dam on the Pound River in Virginia, above another population.

In 1986, the Service contracted with The Nature Conservancy's Eastern Regional Office to conduct status survey work on *Spiraea virginiana* and other Federal candidate plant species. Historic sites were searched in Pennsylvania, Tennessee and West Virginia. Suitable habitat was searched in Maryland (E. Thompson, Maryland Natural Heritage Program, pers. comm. 1988), West Virginia (Bartgis 1987) and Virginia (Ogle 1987). After completing fieldwork in Virginia, Ogle relocated historic sites in Georgia, Tennessee and North Carolina, searched approximately 75 to 100 miles of riverbank resulting in the discovery of about 20 new clones.

and recorded detailed information at all of the 24 known sites (Ogle, pers. comm. 1990). Most field workers reported that much suitable habitat exists; however, they indicated that the potential for finding new locations is low due to the rough and remote terrain that needs to be searched, and the sporadic occurrence of the species. It is anticipated that some additional populations will be found, but apparent lack of sexual reproduction, small sizes of known populations, and a variety of threats suggest that few additional sites will be located.

The U.S. Fish and Wildlife Service (Service) recognized *Spiraea virginiana* as a Category 2 candidate for listing in the Supplement to Review of Plant Taxa for Listing as Endangered or Threatened Species published in the Federal Register on November 28, 1983 (48 FR 53641). Category 2 comprises those taxa for which listing is possibly appropriate but for which existing information is insufficient to support a proposed rule. The updated notice of review for plant taxa published on September 27, 1988, again included *Spiraea virginiana* in Category 2. The proposal to list *S. virginiana* as a threatened species was published in the Federal Register of July 21, 1989. In a December 22, 1989 Federal Register notice, the public comment period was reopened to allow for the publication of required newspaper notices.

After evaluating the results of recent status survey work and comments received on the proposed rule, the Service has determined that listing *Spiraea virginiana* as a threatened species is appropriate. This decision was supported by The Nature Conservancy, Heritage Program personnel and other botanists (Bartgis 1987; Ogle, pers. comm. 1988; T. Rawinski, The Nature Conservancy, pers. comm. 1988; A. Weakley, North Carolina Heritage Program, pers. comm. 1988).

Summary of Comments and Recommendations

In the July 21, 1989 proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might contribute to the development of a final rule. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were contacted and requested to comment. Subsequently, the period for public comment was reopened on December 22, 1989, to allow for the publication of required newspaper notices. Newspaper notices inviting general public comment were

published in the Morgantown, West Virginia, News Herald, the Cookeville, Tennessee, Herald-Citizen, the Beckley, West Virginia, Register/Herald, the Bristol, Tennessee-Virginia, Herald Courier and the Johnson City, Tennessee, Press, from December 20-24, 1989 inclusive. Twenty-two comments were received, including letters from five Federal agencies, eleven State agencies, three conservation organizations and three farm bureau federations. Fifteen letters supported listing (two specifically supported the decision not to list critical habitat), three acknowledged receipt of the proposal, one provided additional information and comments from the final three letters are discussed below.

Letters received from the West Virginia Farm Bureau and the North Carolina and Georgia Farm Bureau Federations contained a number of specific comments on the proposal; these are listed below with the Service's response to each.

Comment 1. The Service should designate critical habitat for this species in order to prevent restrictions on the use of pesticides over a larger area than that needed to protect the plants.

Service response: Environmental Protection Agency (EPA) pesticide registrations, including formulations and use patterns, are reviewed by the Service as part of the formal consultation requirements imposed on Federal agencies by section 7 of the Act. If, as part of that process, the Service determines that a particular use or formulation of a pesticide is likely to jeopardize the continued existence of a threatened or endangered species or adversely modify its critical habitat, then the Service must work with the EPA to devise reasonable and prudent alternatives to preclude jeopardy or adverse modification of the critical habitat. In past consultations with the EPA on the registration of pesticides, reasonable and prudent alternatives have generally involved prohibitions or restrictions on use patterns, formulation, method or time of year of application at the sites of known populations of listed species.

"Critical habitat" is defined by section 3 of the Act as the areas "on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection." However, it does not necessarily follow that restrictions on pesticide use would be limited to the designated critical habitat, since activities that adversely modify critical habitat are prohibited by section 7, even

if they actually take place outside the critical habitat. With or without designated critical habitat, reasonable and prudent alternatives are devised to assure that the areas where a given pesticide is restricted are only large enough to protect listed species.

Finally, the Service notes that there is no available information suggesting that pesticide contamination poses a threat to *S. virginiana*. While it is possible that adverse effects from pesticides may become a future consideration in protection of this species (due to development of new pesticides, changes in pesticide use patterns, or new information about sensitivity of the species to current pesticide uses), the Service does not currently know of any significant conflicts between pesticide use and protection of this species.

Comment 2. Available data may not be sufficient to support listing of Virginia spiraea.

Service response: The proposed rule for *S. virginiana* acknowledged that additional populations may be discovered, and since its publication six additional populations have been reported to the Service. Three were historic records that were subsequently relocated, one was a known site that had not been reported to the Service, and the two remaining locations were new discoveries. However, five of these additional populations are quite small (less than four clumps each) and the sixth population is vulnerable to elimination during flooding. As detailed in the Summary of Factors below, the Service continues to conclude that listing of *S. virginiana* as a threatened species is appropriate.

Comment 3. Location on State and Federal properties and protection agreements for some populations on private land already assure sufficient protection for this species.

Service response: As stated elsewhere in this rule, limited production of viable seeds, low establishment rates for new populations, competition from other woody species, human disturbance at most populations, and other factors also threaten this species.

Comment 4. Protection of this species "may bring unwarranted restraints that may conflict with agricultural practices . . ."

Service response: It is not clear what agricultural practices are referenced above. However, potential conflicts with pesticide registration and application are discussed in the Service's response to Comment 1, above.

Comment 5. Cost benefit ratios should be considered when evaluating the proposed hydroelectric facilities at

Summersville Dam in West Virginia and John Flannagan Dam in Virginia.

Service response: Section 4 of the Act and regulations set forth to interpret and implement this section require that listing determinations be made solely on the basis of the best available information regarding a species' status, without reference to economic or other impacts of such a determination. Further, the information presently available about these potential hydroelectric facilities is not sufficient to determine the impacts on Virginia spiraea; these impacts will be assessed during the section 7 consultation process if the agency responsible for the projects determines that their implementation could affect this threatened species.

Comment 8. One letter strongly opposes acquisition of land to protect Virginia spiraea by any State or Federal agency.

Service response: Following the publication of the final rule, the Service is responsible for developing a recovery plan for this species. This recovery plan, which will describe the various tasks that must be accomplished to stabilize and eventually delist this species, will be made available for comment by government agencies and other interested organizations and individuals. The Service has not yet determined whether land acquisition will be needed in order to recover this species.

Summary of Factors Affecting the Species

After a thorough review and consideration of all information available, the Service has determined that *Spiraea virginiana* should be classified as a threatened species. Procedures found at section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR part 424) promulgated to implement the listing provisions of the Act were followed. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to *Spiraea virginiana* Britt. (Virginia spiraea) are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Human disturbance at Virginia spiraea locations has been observed throughout the range of the species. Obvious signs of disturbance include debris sliding down a railroad embankment, mowing and clearing at the edge of a farm field, cutting for right-of-way maintenance, cutting for an

access path to the river, habitat disturbance by rafters, a culvert draining directly onto plants and debris settling on plants from cutting of trees up slope. Recreational use of rivers is rising, and disturbance to *S. virginiana* populations is expected to continue or increase. However, appropriate disturbance (to eliminate competition from other species) is necessary to maintain open habitat for *S. virginiana* populations.

One population in Mcmangalia County, West Virginia has been eliminated through construction of a dam (Bartgis 1987). Populations have not been relocated and are believed to be extirpated from the only known site in Pennsylvania, two sites each in North Carolina and West Virginia, and one location in Tennessee.

Suitable habitat has been eliminated throughout the range of the species by reservoir construction. Even if populations are not directly flooded, they may face the potential indirect threats of upstream and downstream water stabilization, which would eliminate or reduce scouring action necessary to maintain open habitat for the species.

Natural threats to the species including large scouring floods and competition from other woody species. Although *S. virginiana* is adapted to a fluctuating riverine environment, large storm events (100-year or larger floods) would probably eliminate most populations. Competition from native species such as *Physocarpus opulenta*, *Cornus amomum*, *Alnus serrulata*, *Platanus occidentalis*, *Rhus radicans*, *Salix* sp., *Ilex* sp., and *Vitis* sp. has been observed at most locations in varying degrees, in addition to competition from introduced species like *Pueraria lobata*, *Polygonum cuspidatum*, *Lonicera japonica*, *Miscanthus sinensis*, *Arthraxon hispidus*, *Phalaris arundinacea* and *Rosa multiflora* (Ogle, pers. comm. 1988).

B. Overutilization for Commercial, Recreational, Scientific or Educational Purposes

Spiraea virginiana is not currently a significant component of the commercial trade in native plants; however, the species has good potential for horticultural use, and publicity surrounding the listing of the species could generate an increased demand.

C. Disease or Predation

Aphid damage on shoot tips has been observed at several populations in addition to leaf removal and laceration by caterpillars (Ogle, pers. comm. 1988). It is not known if this predation affects

the competitive ability of *Spiraea virginiana*.

D. Inadequacy of Existing Regulatory Mechanisms

After the listing proposal was published, North Carolina and Virginia added *S. virginiana* to their official State lists. The species is listed as extirpated in Pennsylvania and endangered in Tennessee, North Carolina and Virginia. West Virginia does not maintain an official list of rare plants, although the State Heritage Program includes this plant on its list of sensitive species. The Kentucky State Nature Preserves Commission is currently working to add *S. virginiana* to their list of species of concern, but this list does not have any official State designation. Once the species is Federally listed, *S. virginiana* will automatically be State-listed under the provisions of the Georgia Wildflower Preservation Act. These different State designations offer the species varying levels of protection.

The Georgia Wildflower Preservation Act of 1973 prohibits digging, removal, or sale of State-listed plants from public lands without the approval of the Georgia Department of Natural Resources. One population in Georgia is on State park land and will be provided stronger protection once official State-listing occurs. However, the second population is on private land and is only protected voluntarily through an informal agreement (Patrick, Georgia Natural Heritage Inventory, pers. comm. 1988).

North Carolina General Statute 19-B, 202.12-202.13, provides State-listed plants protection from intrastate trade without a permit, and provides for monitoring and management of listed populations. Most populations in North Carolina occur on private land.

The Virginia Endangered Plant and Insect Species Act provides protection for taking without permits; however, private landowners are exempt from this provision. The Act also gives the Department of Agriculture and Consumer Services authority to regulate the sale and movement of listed plants and to establish programs for the management of listed plants.

S. virginiana is listed as an endangered species on Tennessee's list of endangered, threatened, and rare plant species. The Tennessee Rare Plant Protection and Conservation Act prohibits taking without permission of the landowner and requires that any commercial activity in the species be authorized by permit. Populations in Tennessee occur on Federal, State and

private lands and have some protection under current State regulations.

Pennsylvania presently lists the species as extirpated under the regulations of the Wild Resources Conservation Act (25 Pa. Code, chapter 82). Wild plant management permits are required by anyone who wishes to collect, remove, or transplant wild plants classified as endangered or threatened. Landowners are exempt from these requirements. Pennsylvania regulations also provide for the establishment of native wild plant sanctuaries on private lands where there is a management agreement between the landowner and the Department of Environmental Resources. It is anticipated that if *S. virginiana* were rediscovered in Pennsylvania, a change in the official State status would afford some protection for the species.

Existing regulatory mechanisms do not provide protection from human disturbance, habitat loss or biological limitations, which are presently the major threats to the species.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Biological factors apparently threaten the continued existence of *S. virginiana*. Although the species flowers profusely and is visited by a variety of common insects, mature seeds have been observed at only a few populations (Ogle, pers. comm. 1988). While plants spread clonally, most plants observed are generally very old with well-established root systems. Field biologists have not reported the presence of seedlings at any population. Ogle attempted to germinate seeds collected from two North Carolina populations and reported successful germination from seeds collected at only one site. Nicholson collected seeds from a Virginia population but only five seeds germinated out of hundreds (perhaps thousands) of seeds collected, an unusual occurrence for *Spiraea* species (R. Nicholson, Arnold Arboretum Greenhouse, pers. comm. 1988). Germination tests indicate that a mineral soil may be required for successful germination; then, successful growth and establishment of young plants may require humus to be added through seasonal deposition without flooding or swiftly flowing waters (e.g., slowly receding after high flows) (Ogle, pers. comm. 1988).

It is expected that new populations could originate from clumps breaking off and becoming established downstream during flood events. However, severe floods could potentially eliminate original populations and the dispersed clumps would have to lodge in a

location where conditions favorable to establishment and survival existed (open canopy, lack of competition, available moisture without flooding or fast flows, and sufficient soil for plants to take root).

While few details of the life history are known, observations made during field visits suggest that each population may represent only one genotype (for a total of 24 different genotypes), and that opportunities for colonization and establishment of new sites are very limited (Ogle, pers. comm. 1988). Most populations appear to be very old and face a variety of threats throughout the range of the species. Heavy competition from other species occurs at most populations.

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by the species in determining to make this rule final. Based on this evaluation, the preferred action is to list *Spiraea virginiana* as a threatened species. Although known from 24 sites in 6 states, human disturbance, a constantly fluctuating environment, and competition from other species pose problems to the continued existence of many populations. Additionally, biological factors apparently limit opportunities for establishment and colonization of new sites. Field observations suggest that only 24 different genotypes exist, and 88 percent of the known populations are small to moderate in size. However, populations are reproducing clonally, and it is possible that a few additional populations will be discovered. These factors support listing as a threatened species. Critical habitat is not being designated for reasons discussed in the following section.

Critical Habitat

Section 4(a)(3) of the Act requires that to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time the species is determined to be endangered or threatened. The Service finds that designation of critical habitat is not prudent for *Spiraea virginiana* at this time. Most populations of this species are limited to moderate in size and loss of plants to vandalism, or increased collection for scientific or horticultural use could potentially eliminate smaller populations. Collecting, without permits, will be prohibited at the locations under Federal management; however, taking restrictions will be difficult to enforce at these sites and will not be applicable to sites on private land. Therefore, publication of critical habitat

descriptions and maps would increase the vulnerability of the species without significantly increasing protection. The owners of all populations on Federal and State lands have been informed of the importance of protecting the species and its habitat. Landowners of major populations on private land have also been contacted by the Service, and State heritage program personnel have contacted two other landowners. Protection of this species' habitat will be addressed throughout the recovery process and through the section 7 jeopardy standard. No additional benefits would result from a determination of critical habitat. For these reasons, it would not be prudent to determine critical habitat for *Spiraea virginiana* at this time.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State and private agencies, groups and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species.

The Nature Conservancy and State natural resource agencies have already secured voluntary protection of three sites. As a result of the Service funded status survey work and the subsequent proposal to list the species, three States have added *Spiraea virginiana* to their official State lists.

Six populations occur totally or partially on Federal lands (U.S. Forest Service, National Park Service and Army Corps of Engineers). An additional four sites occur partially or completely on State park lands in Georgia, Tennessee, Virginia and West Virginia. The appropriate managing agencies have been contacted, and it is anticipated that they will implement appropriate management plans.

Listing should encourage research on critical aspects of population biology. Information is needed regarding the number of different genotypes, the lack of successful seed production, and disturbance regimes required for population establishment and maintenance. These factors will be important in long-term management considerations for individual populations.

The protection required of Federal agencies and the prohibitions against certain activities for listed plants are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened and with respect to its critical habitat, if any is being designated. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR part 402. Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species or to destroy or adversely modify its critical habitat. If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency must enter into formal consultation with the Service.

Two populations occur downstream of dams at Army Corps of Engineers Reservoirs (John Flannagan Dam, Dickenson County, Virginia and Summersville Lake, Nicholas County, West Virginia). A hydroelectric project that requires a license from the Federal Energy Regulatory Commission (FERC) is currently proposed for Summersville Dam and long range plans include a similar project at John Flannagan Dam. Three populations in West Virginia occur in areas recently designated a National Recreation Area or a National Scenic River. These three populations occur on the Gauley, Meadow and Bluestone Rivers. Although these populations presently occur on private land, it is anticipated that the National Park Service will eventually acquire these lands. All of these projects will require consultation with the Service.

Other federally funded or permitted actions that could affect this plant include, but are not limited to, Soil Conservation Service watershed management activities, FERC-permitted hydroelectric projects, road construction projects involving Federal Highway Administration funds, railroad abandonment proposals under the jurisdiction of the Interstate Commerce Commission, or projects under the jurisdiction of the Army Corps of Engineers.

The Act and its implementing regulations found at 50 CFR 17.71 and 17.72 set forth a series of general trade prohibitions and exceptions that apply to all threatened plants. With respect to *Spiraea virginiana*, all trade prohibitions of section 9(a)(2) of the Act, implemented by 50-CFR 17.71, apply. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, sell or offer for sale this species in interstate or foreign commerce, or to remove and reduce to possession the species from areas under Federal jurisdiction. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. In addition, for listed plants, the 1988 amendments (Pub. L. 100-478) to the Act prohibit the malicious damage or destruction on Federal lands and the removal, cutting, digging up, or damaging or destroying of listed plants in knowing violation of any State law or regulation, including State criminal trespass law. Certain exceptions can apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving threatened species under certain circumstances. It is anticipated that few trade permits would ever be sought or issued since the species is not common in cultivation or the wild. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Office of Management Authority, U.S. Fish and Wildlife Service, P.O. Box 3507, Arlington, VA 22203 (703/358-2093).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination

was published in the Federal Register on October 25, 1983 (48 FR 49244).

References Cited

Bartgis, R. 1987. Status surveys in West Virginia for *Carex polymorpha*, *Spiraea virginiana*, and *Thalictrum steeleanum*. Unpub. rept. West Virginia Field Office. The Nature Conservancy.
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Author

The primary author of this rule is Sharon W. Morgan (see ADDRESSES section).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture)

Regulation Promulgation

PART 17—[AMENDED]

Accordingly, part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, is amended as set forth below:

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1543; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500(1986), unless otherwise noted.

2. Amend § 17.12(h) for plants by adding the following, in alphabetical order under the family Rosaceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

* * * * *
 (h) * * *

| Species | | Historic range | Status | When listed | Critical habitat | Special rules |
|---------------------------|------------------|--|--------|-------------|------------------|---------------|
| Scientific name | Common name | | | | | |
| Rosaceae—Rose family. | | | | | | |
| <i>Spiraea virginiana</i> | Virginia spiraea | U.S.A. (GA, KY, NC, PA, TN, VA, T WV). | | 389 | NA | NA |

Dated: May 10, 1990.

Bruce Blanchard,

Acting Director, U.S. Fish and Wildlife Service.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 661

[Docket No. 900511-0111]

Ocean Salmon Fisheries Off the Coasts of Washington, Oregon, and California

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: Notice of reopening of a fishery.

SUMMARY: NOAA announces the reopening of the ocean commercial salmon fishery in the exclusive economic zone (EEZ) from the U.S.-Canada border to Cape Falcon, Oregon, for four days on June 8 through June 11, 1990. This fishery was closed at midnight, June 2, 1990, based on projections that the 26,100 chinook salmon quota for the May 1 through June 15, 1990 fishing period had been reached. Evaluation of landing data following closure of the fishery indicates that sufficient chinook salmon remain to allow four additional days of fishing. This action is intended to maximize the harvest of chinook salmon in this subarea without exceeding the ocean share of salmon allocated to the commercial fishery.

DATES: *Effective:* Reopening of the EEZ to commercial salmon fishing between the U.S.-Canada border and Cape Falcon, Oregon, is effective 0001 hours local time June 8, 1990, through 2400 hours local time June 11, 1990. Actual notice to affected fishermen was given prior to that time through a special telephone hotline and U.S. Coast Guard Notice to Mariners broadcasts as provided by 50 CFR 661.21, and 661.23 (as amended May 1, 1989). *Comments:* Public comments are invited until July 2, 1990.

ADDRESSES: Comments may be mailed to Rolland A. Schmitten, Director,

Northwest Region, National Marine Fisheries Service, 7600 Sand Point Way NE., BIN C15700, Seattle, WA 98115-00870. Information relevant to this notice has been compiled in aggregate form and is available for public review during business hours at the office of the NMFS Northwest Regional Director (Regional Director).

FOR FURTHER INFORMATION CONTACT: William L. Robinson at 206-526-6140.

SUPPLEMENTARY INFORMATION: Regulations governing the ocean salmon fisheries at 50 CFR part 661 specify at § 661.21(a)(2) that

If a fishery is closed under a quota before the end of a scheduled season based on overestimate of actual catch, the Secretary will reopen that fishery in as timely a manner as possible for all or part of the remaining original season provided the Secretary finds that a reopening of the fishery is consistent with the management objectives for the affected species and the additional open period is no less than 24 hours.

In its preseason notice of 1990 management measures (55 FR 18894, May 7, 1990), NOAA announced that the 1990 commercial fishery for all salmon except coho in the subarea from the U.S.-Canada border to Cape Falcon, Oregon, would begin on May 1 and continue through the earlier of June 15 or the attainment of a quota of 26,100 chinook salmon. This fishery has been open May 1 through May 14, May 18 through May 27, and May 31 through June 2. Each closure was based on projections that the quota would be reached by that date. However, subsequent evaluation of landing data indicated that the closures were based on overestimates of the catch, and the quota had not been reached.

According to the best available information, commercial catches through June 2 totaled 23,400 chinook salmon, leaving 2,700 chinook salmon available for harvest in the subarea chinook quota. This amount of available chinook salmon has been determined to be sufficient for four additional days of fishing, on June 8 through June 11. This action is being taken in as timely a manner as possible to allow commercial salmon fishermen full opportunity to catch the chinook salmon quota prior to the scheduled end of the fishing season on June 15, 1990. The Regional Director

has determined that the reopening of the commercial fishery in this subarea is consistent with the management objectives for chinook salmon in this subarea. As in the original season (May 1 through June 15), Conservation Zone 1, the Columbia River mouth, is closed (55 FR 18894, May 7, 1990).

In accordance with the revised inseason notice procedures of 50 CFR 661.20, 661.21, and 661.23, actual notice to fishermen was given prior to 0001 hours local time, June 8, 1990, by telephone hotline number (206) 526-6667 and by U.S. Coast Guard Notice to Mariners broadcasts on Channel 16 VHF-FM and 2182 KHz. NOAA issues this notice of the reopening of the commercial salmon fishery in the EEZ from the U.S.-Canada border to Cape Falcon, Oregon, which is effective 0001 hours local time, June 8, 1990 through 2400 hours local time, June 11, 1990. This notice does not apply to treaty Indian fisheries or to other fisheries which may be operating in other areas.

The Regional Director consulted with representatives of the Pacific Fishery Management Council, the Washington Department of Fisheries, and the Oregon Department of Fish and Wildlife regarding this reopening. The States of Washington and Oregon will manage the commercial fishery in state waters adjacent to this area of the EEZ in accordance with this federal action.

Because of the need for immediate action, the Secretary of Commerce has determined that good cause exists for this notice to be issued without affording a prior opportunity for public comment. Therefore, public comments on this notice will be accepted for 15 days after filing with the Office of the Federal Register, through July 2, 1990.

This action is authorized by 50 CFR 661.23 and is in compliance with Executive Order 12291.

List of Subjects in 50 CFR Part 661

Fisheries, Fishing, Indians.

Authority: 16 U.S.C. 1801 *et seq.*

Dated: June 12, 1990.

Richard H. Schaefer,
Director of Office of Fisheries, Conservation and Management.

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