DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

Determination of Stephanomeria Malheurensis (Matheur Wire-Lettuce) To Be an Endangered Species, With Determination of its Critical Habitat

AGENCY: U.S. Fish and Wildlife Service: Interior:

ACTION: Finel rule.

summann. The U.S. Fish and Wildlife Service determines the plant Malbeur wire lettere (Stephenomeric mulbeureusis) to be an Endangezed species and designates its Critical Habitat, under the authority contained in the Endangered Species Act of 1973. as amended. This plant is known only from one small population located in Harney County in southeastern Oregon. The home population of this species is vulnerable to any substantial habitat alteration and faces the potential threat of surface mining for reclites on and near the site where it occurs. It is immediately threatened by competition from an exotic gram and grazing by native herimozes (probably black-tailed jackrabbits), which stees the small population. A determination that Stephanores malheurensis is an Endangered species and designation of its Critical Maritat implement the full protection provided by the Endangered Species Act of 1973, as amended.

DATE: This rule becomes effective on December 10, 1982.

ADDRESS: The complete file for this rulemaking is available for inspection during normal hours by appointment at the Service's Office of Endangered Species, 1000 North Glebe Road, Arlington, Virginia. An active file on this species is maintained at the Regional Office of the U.S. Fish and Wildlife Service, 500 N.E. Multnomah Street, Suite 1692, Portland, Oregon.

FOR FURTHER INFORMATION CONTACT:

Mr. Sanford R. Wilbur, Senior Staff Biologist, Endangered Species Program, Region 1, U.S. Fish and Wildlife Service, Department of the Interior, 500 N.E. Multnomah Street, Suite 1692, Portland, Oregon 97232 (501/231–6131).

SUPPLEMENTARY INFORMATION: The first discovery of Stephanomeria malheurensis was made in 1966 when seeds of this species were collected along with those from a population of the ancestral plant, Stephanomeria exigua ssp. coronaria. The locality where these two taxa are found together is at the northern end of the range of the ancestral taxon. Further studies by Dr. Leslie Gottlieb of the University of California, Davis, demonstrated consistently distinguishable field characteristics and reproductive isolation between these two taxa, thus recognizing stephanomeria malheurensis as a species new to science (Gottlieb 1973, 1977, 1978, 1979). This plant is a member of the aster family (Asteraceae) and grows to 5 dm. tall, with a basal rosette of leaves, a much branched stem with scale-like leaves, and numerous pink to white (rarely yellow-orange) flower heads. Stephanomeria malheurensis is known only from one locality near Malheur National Wildlife Refuge in Harney County, Oregon. [The report in Gottlieb, 1979, p. 268 of a second nearby site is in error (Gottlieb, 1982)]. The species' habitat is situated on top of a dry, broad hill on a soil derived from volcanic tuff layered with some limestone. This is an annual species and the numbers of individual plants vary greatly from year to year depending on the amount of precipitation prior to and during the spring growing season. This plant flowers in July and August.

The extremely restricted range and numbers of this plant make the species vulnerable to even small land disturbances in and around its habitat. Such a potential threat exists in the form of some recently established mining claims which include the habitat of Stephanomeria malheurensis. Potential zeolite mining in the area endangers the continued existence of this species

(Griffith and Hohn, 1979), although recent communications with the company involved indicate mining is not imminent and that it wishes to cooperate with the U.S. Fish and Wildlife Service to conserve the species.

A much more immediate threat is the competition from introduced exotic plants, especially cheat grass (Bromus tectorum), and grazing by small herbivores (presumed to be black-tailed jackrabbits (Lepus californicus)), which are apparently severely stressing the small existing population (Franklin, 1981). These factors and their potential long term impacts are not well understood at present.

Background

Section 12 of the Endangered Species Act of 1973 directed the Secretary of the Smithsonian Institution to prepare a report on those plants considered to be endangered, threatened, or extinct. This report, designated as House Document No. 94-51, was presented to Congress on January 9, 1975. On July 1, 1975, the Director published a notice in the Federal Register (40 FR 27823-27924) of his acceptance of this report as a petition within the context of section 4(c)(2) of the Act, and of his intention thereby to review the status of the plant taxa named within. On June 16, 1976, the Service published a proposed rule in the Federal Register (41 FR 24523-24572) to determine approximately 1,700 vascular plant taxa to be Endangered species. This list was assembled on the basis of comments and data received by the Smithsonian Institution and the Service in response to House Document No. 94-51 and the July 1, 1975 Federal Register publication. Stephanomeria malheurensis was included in the July 1, 1975, notice and the June 16, 1976, proposal. General comments on the 1976 proposal are summarized in an April 26, 1978, Federal Register publication (43 FR 17909-17916).

The Endangered Species Act Amendments of 1978 (Pub. L. 95–632) required that all proposals over two years old be withdrawn. On December 10, 1979, the Service published a notice of the withdrawal of the still applicable portions of the June 16, 1976, proposal along with other proposals which had expired (44 FR 70796–70797).

In August 1980 new field work was carried out at the site of the wire-lettuce. It was discovered that exotic cheat grass (Bromus tectorum) had heavily invaded the area, apparently as a consequence of a 1972 controlled burn which had thrown the natural vegetation out of balance. Only fewer than several dozen Stephanomería plants could be found after diligent search. Previously as

many as 750 individuals of S. malheurensis were estimated to have grown at the site in any one year. On October 31, 1980, the Service published a proposed rule in the Federal Register (45 FR 72234-72237), advising that sufficient new information was on file to repropose Stephanomeria malheurensis as an Endangered species pursuant to the Endangered Species Act of 1973, as amended. Critical Habitat also was proposed on October 31, 1980, for the first time.

This proposal summarized the factors thought to be contributing to the likelihood that Stephanomeria malheurensis soon could go extinct. It also specified the prohibitions which would be applicable if such a determination of the species and its habitat were made.

According to section 2(b)(1) of the Endangered Species Act Amendments of 1982 (Pub. L. 97-304), the proposal of Stephanomeria malheurensis shall be treated as having been proposed on the date of enactment of these amendments, October 13, 1982. This has the effect of extending the deadline for a final rule for this species to October 13, 1983. All procedural requirements for the proposal had been complied with, as specified in section 2(b)(1).

Summary of Comments and Recommendations

In the October 31, 1980, Federal Register proposed rule and associated press releases, all interested parties were invited to submit factual reports or information and comments or suggestions which might contribute to the formulation of a final rule. A letter was sent to Governor Ativeh of Oregon on November 12, 1980, notifying him of the proposed rule for Stephanomeria malheurensis. In November 1980, letters or memoranda were sent to appropriate Federal agencies, local governments and other interested parties notifying them of the proposal and soliciting their comments and suggestions. The proposed rule also announced that a public meeting would be held on the proposal on November 13, 1980, and a public hearing on December 2, 1980, since Critical Habitat was being proposed for the species. The meeting and hearing were held in Burns, Oregon as scheduled. All comments received during the period October 31, 1980. through January 29, 1981, are discussed below.

Official comments were received from the Governor of Oregon, the Director, Bureau of Land Management (BLM), and the Harney County Chamber of Commerce. Comments also were received from 11 additional individuals or representatives of various organizations. Several comments were made regarding the proposal at the public meeting or hearing. However, all of these comments were restated in writing. These are included below.

A total of 14 written responses thus was received by the Service relating to this proposal. Twelve of these responses favored the proposed action. One response expressed no firm position with regard to the proposed action. although it recommended additional studies to further determine the natural adaptability of this species. One response was opposed to the proposed action. Most of the supportive responses pointed to the fact that this species is apparently restricted to one small area making the species especially vulnerable to extinction. Many respondents also stated that mining for zeolite should not be given precedence over conservation of the essential habitat of the species. Several other comments also supported the proposal on the basis of this plant species' scientific importance.

The Governor of Oregon offered full support to the proposal and referred the Service to separate comments submitted to the Service by Dr. Kenton L. Chambers, Professor of Botany, Oregon State University, Corvallis. Dr. Chambers is thoroughly familiar with Stephanomeria malheurensis and the research conducted on this species. He fully acknowledged the findings and conclusions of Dr. Leslie Gottlieb, the scientist most involved in that research. Dr. Chambers further stated that the recent information (1980 field season) indicated that the species is very much depleted in numbers of individuals compared with numbers present at the site in prior years. He suggested a correlation with the increased abundance of weedy, competitive grasses such as cheat grass. Dr. Chambers concluded that because of the scientific values and the current status of the species, conservation of the plant should be given first priority.

Dr. Leslie Gottlieb, Professor of Genetics at the University of California at Davis, provided supportive comments as well. Dr. Gottlieb and his students have spent many years researching this species in the field and in the laboratory and he has provided ample evidence to support the proposal. In his comments he also pointed out that recent evidence appears to show significant declines of this plant, correlated with an abundance of cheat grass. Dr. Gottlieb believes the rulemaking is essential to conserve Stephanomeria malheurensis and

especially important because of the scientific significance of the species.

The Bureau of Land Management acknowledged the proposal to list this species and restated its commitment to protect the habitat of the plant, which it had declared a Scientific Study Area in 1974. It said they intend to continue monitoring the status of the species.

The Harney County Chamber of Commerce suggested that further research be conducted to search for other colonies which it believes may exist or to determine whether this species can maintain itself under natural conditions. Though it did not specifically recommend for or against the proposal, it stated that the 160 acre Scientific Study Area is ample habitat for the plant and mineral exploration should proceed without further restrictions. They also believed that if the species proves to be "non-adaptive," Endangered status and Critical Habitat designation should be promptly removed. It should be pointed out that the research of Dr. Gottlieb on the species (1973, 1977, 1978, 1979) strongly suggests that it recently evolved at the site where it now exists and that it is unlikely to occur elsewhere, as he has made non-productive searches for it elsewhere since discovering it in 1968.

One private individual submitted comments opposing the proposal. He believed that land would be much more valuable in mineral production. It should be noted that the Endangered Species Act of 1973, as amended, requires the Service to list those species found to be in danger of extinction now or in the foreseeable future. Section 2(a)(3) of the Act states some of the values Congress found in such species. Stephanomeria malheurensis has been considered of significant scientific value in understanding a process of speciation, and considerable research on it has been funded by the National Science Foundation as well as the John Simon Guggenheim Memorial Foundation.

Conclusion

After a thorough review and consideration of all the available information, the Secretary has determined that Stephanomeria malheurensis Gottlieb is in danger of extinction throughout all or a significant portion of its range due to one or more factors described in Section 4(a)(1) of the Act. The factors and their application to Stephanomeria malheurensis are as follows:

A. Present or threatened destruction, modification, or curtailment of its habitat or range. Stephanomeria malheurensis has been known from only one 70-acre location south of Burns in Harney County, Oregon, since its discovery in 1966. The restricted range of the species makes it vulnerable to many types of habitat alteration. Zeolite mining in the area is possible in the future, as mining claims cover the entire area of this species' habitat as well as all adjacent areas. Protection of the habitat of Stephanomeria malheurensis and its immediate surroundings is imperative to the conservation of the species. The Anaconda Minerals Company has recently indicated that it is willing to cooperate with the Service to conserve the species, and that mining is not imminent.

B. Overutilization for commercial, recreational, scientific, or educational purposes. Not applicable to this species.

C. Disease or predation (including grazing). A 160-acre tract of land including the entire population of Stephanomeria malheurensis has been fenced, which prevents grazing of the species by livestock. Larvae of an unidentified insect have been found foraging on the species, but their effect is unknown. Grazing by mammalian herbivores (suspected to be jackrabbits) has been noted on some individual plants. This grazing caused severe stress to the few plants of this species that grew in 1961 (Franklin, 1961).

D. The inadequacy of existing regulatory mechanisms. The Bureau of Land Management (BLM) administers all of the land supporting this species, and in August 1974 it gave notice of the closure of the 160 acres necessary for the species' survival (40 FR 39536-39537). However, zeolite was determined to be a locatable mineral in. June 1977 under mining law. In consequence, access to the zeolite ore is regulated by the Mining Law of 1872, as amended. The adequacy of the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579), often called the BLM Organic Act, to protect Stephanomeria malheurensis should zeolite mining become active is unclear in these circumstances.

E. Other natural or man-made factors affecting its continued existence. The small size of the only known population causes this species to be in significant danger of extinction due to natural fluctuations. Since this species is an annual, its numbers vary greatly from year to year, depending largely on the amount of precipitation prior to and during the spring growing season. In 1974 and 1975, juvenile populations of all Stephanomeria at the site numbered 12,000 and 35,000, respectively (Gottlieb, 1977]. New fieldwork showed only a few dozen individuals in August 1980 (Gottlieb, 1980). In addition, Gottlieb

[1980] discussed the effects of a 1972 controlled burn which swept much of the colony area by accident. Cheat grass (Bromus tectorum) has invaded the burnt area, much to the detriment of Stephanomeria. The 1981 field reports indicate the species is still very low in numbers (about 50 individuals), and the exotic cheat grass invasion still a severe problem.

Critical Habitat

The Act defines "Critical Habitat" as (i) the specific areas within the geographical area occupied by the species at the time it is listed on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species.

Critical Habitat for Stephanomeria malheurensis is being designated to include the 160-acre Scientific Study Area on public land of the Bureau of Land Management located 27 miles south of Burns in Harney County. Oregon. This includes the entire, lone population of Stephanomeria malheurensis. This area is located on the lands west of State Highway 205 within the SEX of the NEX, and the NEX of the SE¼, Section 11; and the W½ of the SW% of the NW%, and the SW% of the NE% of the SW%, and the NW% of the SW 14, Section 12, T27S, R30E, Willamette Meridian. Natural expansion of the population within this Scientific Study Area will likely be a desired management goal in the future, through the recovery process under Section 4(f) of the Act. The designated Critical Habitat includes land within the Scientific Study Area which presently does not support the species but provides a buffer against adverse indirect impacts and which is considered essential for the conservation of the species.

Section 4(b)(8) of the Act requires, to the maximum extent practicable, that any final rule to determine Critical Habitat be accompanied by a brief description and evaluation of those activities which, in the opinion of the Secretary, may adversely modify such habitat if undertaken, or may be affected by such designation. Such activities are identified below for this species. It should be emphasized that Critical Habitat designation may not affect all of the activities mentioned below, as Critical Habitat designation

only affects Federal agency activities through Section 7 of the Act.

Any activity which would significantly disturb the soil, topography or other physical and biological components of the area where Stephanomeria malheurensis occurs would adversely modify its Critical Habitat. Land uses in the immediate locality of the population and in its surroundings would need to be carefully regulated to prevent such modifications. To the extent allowed by the mining laws of this country, this might require restricting mining activities within and perhaps near the area in order to prevent adverse direct and indirect impacts. Since access to zeolite on BLM land is regulated by the Mining Law of 1872, the effect of this species' listing and Critical Habitat designation on any future mining activity is uncertain (cf. BLM, n.d.; Noble 1980; Sheridan 1977). The cooperative efforts between the Anaconda Minerals Company, the BLM, the Service, and any others so as to avoid damage to the species and its habitat will certainly continue to be needed.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of specifying a particular area as Critical Habitat. The Service has prepared a final impact analysis and believes that economic and other impacts of this action are not significant for the foreseeable future. The area designated as Critical Habitat for Stephanomeria malheurensis is already being protected by the BLM, and represents only about 5 percent of the 3,000 acres with mining claims of the Anaconda Minerals Company. The exact distribution of the subsurface deposists of zeolite are unknown, so that their relationship to the habitat requirements of the species cannot be determined. Furthermore, according to the company, it is not known whether the zeolite will ever be commercially exploitable in this area. If it is, it is not known whether Section 7 would provide protective regulation for the species and its Critical Habitat. In addition, the company has indicated to the Service that it has no plans for mining at the site at present and that it is interested in cooperating with the Service to conserve this wire-lettuce.

The Service has contacted the Bureau of Land Management, which has jurisdiction over the land under consideration in this action, as well as the Anaconda Minerals Company, which has the Federal mining claims on the land where the species occurs. Based on the findings of the Service, no

significant economic impacts are anticipated as a result of this action.

References Cited

Bureau of Land Management. n.d. Draft Environmental Impact Statement. Surface Management of Public Lands under the U.S. Mining Laws, 43 CFR 3809. BLM, Washington.

Franklin. A. L. 1981. Stephanomeria malheurensis 1981 fieldwork. BLM report. 13 pp.

Gottlieb, L. D. 1973. Genetic differentiation, sympatric speciation, and the origin of a diploid species of *Stephanomeria*. Amer. J. Bot. 60(6):545-553.

Gottlieb, L. D. 1977. Phenotypic variation in Stephanomeria exigua ssp. coronaria (Compositae) and its recent derivative species "Malheurensis." Amer. J. Bot. 64(7):873–880.

Gottlieb, L. D. 1978. Stephanomeria malheurensis (Compositae), a new species from Oregon. Madroño 25(1):44–46.

Gottlieb, L. D. 1979. The origin of phenotype in a recently evolved species, pages 264–286 in O. T. Solbrig et al., Topics in Plant Population Biology. Columbia University Press, New York.

Gottlieb, L. D. 1980. Letter dated September 3, 1980 addressed to Mr. Chad Bacon, Manager, BLM, Burns, Oregon. Portland Regional Office, U.S. Fish and Wildlife Service.

Gottlieb, L. D. 1982. Personal communication to P. Stine, U.S. Fish and Wildlife Service.

Griffith, S. K., and J. E. Hohn. 1979. Status report on *Stephanomeria malheurensis* Gottlieb. Prepared by U.S. Fish and Wildlife Service, Portland, July 5, 1979.

Noble, H. 1980. Environmental regulation of hardrock mining on public lands. Harvard Environmental Law Review 4(1):145–163.

Sheridan, D. 1977. Hardrock mining on the public land. Council on Environmental Quality. GPO, Washington.

Effects of This Rule

In addition to the effects discussed above, the effects of this rule include, but are not necessarily limited to, those mentioned below.

Section 7(a) of the Act requires
Federal agencies to evaluate their
actions with respect to any species
which is listed as Endangered, and any
designated Critical Habitat. Provisions
for Interagency Cooperation
implementing this are codified at 50 CFR
Part 402. Federal agencies are required
to consult with the Service to ensure
that actions they authorize, fund, or
carry out are not likely to jeopardize the
continued existence of Stephanomaria
malheurensis or adversely modify its
Critical Habitat.

The only known action which possibly could be affected by the Endangered Species Act is the possible zeolite mining by private interests based on mining claims on the Federal land in the immediate area which includes the

species and its Critical Habitat. As the Federal land management agency, the Bureau of Land Management is responsible for carrying out the intentions of the Endangered Species Act on this land. The Mining Law of 1872. however, may restrict the authority of the BLM to regulate mining activities on locatable minerals, including zeolite.

Voluntary or mandatory protection of this species and its habitat will require continuing cooperation between the BLM, the private mining interests, and the U.S. Fish and Wildlife Service. The company has no timetable or plans for exploratory mining.

The Act and implementing regulations published in the June 24, 1977, Federal Register (42 FR 32372-32381) set forth a series of general trade prohibitions and exceptions which apply to all Endangered plant species. The regulations are found at § 17.61 of 50 CFR and are summarized below. With respect to Stephanomeria malheurensis all trade prohibitions of Section 9(a)(2) of the Act, as implemented by § 17.61, 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, or sell or offer for sale this species in interstate or foreign commerce. Certain exceptions could apply to agents of the Service and State conservation agencies. The Act and 50 CFR § 17.62 and 17.63 also provide for the issuance of permits to carry out otherwise prohibited activities involving Endangered species, under certain circumstances. No such trade in this species is known or anticipated. It is anticipated that few trade permits involving the species will ever be requested.

Section 9(a)(2)(B) of the Act, as amended in 1982, states that it is unlawful to remove and reduce to possession Endangered plant species from areas under Federal jurisdiction. This new taking prohibition applies to Stephanomeria malheurensis. Permits for exceptions to this prohibition are

available through Section 10(a) of the Act, following the general approach of 50 CFR § 17.62 and 17.63 until revised regulations are promulgated. Requests for copies of the regulations on plants and inquiries regarding them may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service. Washington, D.C. 20240, 703/235-1903. It is anticipated that few taking permits for the species will ever be requested.

This plant is now listed as an Endangered species and its Critical Habitat designated, so certain conservation authorities become available and protective measures may be undertaken for it. These could include increased management of the species and its habitat, and the development of a recovery plan for the species as specified in Section 4(f) of the Act.

The Service will review this species to determine whether it should be considered for placement upon the Annex of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, and whether it should be considered for other appropriate international agreements.

National Environmental Policy Act

An Environmental Assessment has been prepared in conjunction with this rule. It is on file in the Service's Portland, Oregon, Regional Office, and Washington, D.C., Office of Endangered Species, and may be examined by appointment during regular business hours. This assessment forms the basis for a decision that this is not a major Federal action which would significantly affect the quality of the human environment within the meaning of Section 102(2)(C) of the National Environmental Policy Act of 1969 (Implemented at 40 ČFR Parts 1500-1508).

Note.—The Department of the Interior has determined that this rule is not a major rule under Executive Order 12291. Significant commercial trade in Stephanomeria malheurensis would not be impacted by this rule because none is known to exist at present nor is any anticipated. Federal zeolite

mining claims staked on and around the Critical Habitat on BLM land are presently inactive with no immediate plans for development. The area represents only about 5 percent of the 3,000 acre area with mining claims by the Anaconda Minerals Company. The exact distribution of the subsurface deposits of zeolite are unknown, so that their relationship to the habitat requirements of the species cannot be determined. It is not known at this time whether these claims are commercially exploitable, according to a recent communication from the company which has also indicated that the company is willing to cooperate with the Service to conserve the species. Since this rule was proposed before January 1, 1981, a Determination of Effects on Small Entities is not required by the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). This rule does not contain information collection requirements which require approval by the Office of Management and Budget under the Paperwork Reduction Act (44 U.S.C. 3501 et seq.).

Authority and Authors

This rule is being published under the authority contained in the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.; 87 Stat. 884, 92 Stat. 3751, 93 Stat. 1225, 96 Stat. 1411). The primary author of the rule is Peter A. Stine, Endangered Species Staff, U.S. Fish and Wildlife Service, Portland. Oregon (503/231-6179). Dr. Bruce MacBryde of the Service's Washington Office served as editor.

List of Subjects in 50 CFR Part 17

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

Regulations Promulgation

Accordingly, Part 17, Subchapter B of Chapter I, Title 50 of the U.S. Code of Federal Regulations is amended as set forth below:

1. Section 17.12(h) is amended by adding, in alphabetical order under Asteraceae, the following plant:

§ 17.12(h) Endangered and threatened plants.

PLANTS

Species						When	Critical	Special	
Scientific name		Common name			Historic range	Status	listed	habitat	rules
Asteraceae—Aster family: Stephanomeria malheurensis	•	. Malheur wire	e-lettuce	U	.S.A. (OR)	E	125	17.96(a)	N/A,

2. Section 17.96 is amended by adding the critical habitat of Stephanomeria malheurensis as the first entry as follows:

§ 17.96(a) Flowering plants.

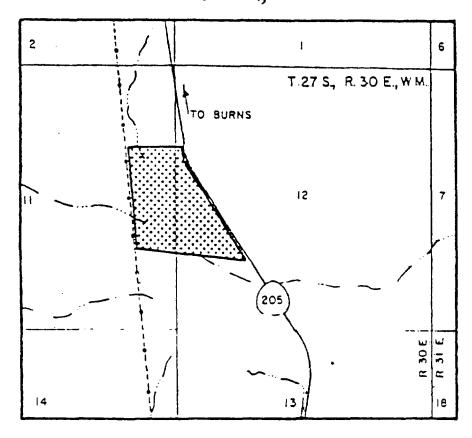
Family Asteraceae: Malheur wirelettuce (Stephanomeria malheurensis). Oregon, Harney County; the lands west of State Highway 205 within the SE 1/4 of the NE % and the NE % of the SE %. Section 11; and the W ½ of the SW ¼ of

the NW %, and the SW % of the NE % of the SW %, and the NW % of the SW %.

Section 12, T27S, R30E. Willamette Meridian.

MALHEUR WIRE-LETTUCE

Harney County, OREGON



Dated: October 17, 1982.

J. Craig Potter,

Deputy Assistant Secretary for Fish and Wildlife and Parks.

(FR Doc. 82-30881 Filed 11-9-82: 8:45 am)

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