1.1 What is the purpose of this chapter? This chapter:

A. Establishes policy, procedures, and responsibilities for pest management activities on and off U.S. Fish and Wildlife Service (Service) lands. It is consistent with the Department of the Interior (Department) Integrated Pest Management policy (517 DM 1) and other applicable authorities;

B. Adopts Integrated Pest Management (IPM) as our method for making pest management decisions; and

C. Provides guidance to employees on how to implement IPM for all pest management activities.

1.2 What is Integrated Pest Management (IPM)? IPM is:

A. A sustainable approach to managing pests that uses the following kinds of tools in a way that minimizes health, environmental, and economic risks:

(1) Biological (e.g., predators, parasites, and pathogens),

(2) Cultural (e.g., crop rotation, alterations in planting dates, and sanitation),

(3) Physical (e.g., barriers, traps, hand-pulling, hoeing, mowing, and tilling), and

(4) Chemical (e.g., pesticides, such as herbicides, insecticides, or fungicides).

B. A science-based, decisionmaking process that incorporates management goals, consensus building, pest biology, monitoring, environmental factors, and selection of the best available technology to achieve desired outcomes while minimizing effects to non-target species and the environment and preventing unacceptable levels of pest damage.

1.3 What are pests? Pests are living organisms, including invasive plants and introduced or native organisms, that may interfere with achieving our management goals and objectives on or off our lands, or that jeopardize human health or safety.

1.4 What is the Service’s pest management policy? Our policy is to:

A. Promote and adopt pest prevention as the first line of defense by using a pathway management strategy such as Hazard Analysis and Critical Control Point (HACCP) planning to prevent unintended spread of species and biological contamination. (See 750 FW 1 for more information on HACCP planning).

B. Focus on conserving more pristine habitats, monitor these areas, and protect them from invaders.
C. Design and maintain the stability of structures, museum collections, and developed landscapes, and restore and maintain habitats to prevent and reduce conditions conducive to the introduction or spread of pests.

D. Use IPM methods to eliminate or reduce impacts from vertebrate and invertebrate pests to achieve site-management goals and objectives.

E. Use cost-effective pest management practices that pose the least risk to humans, natural and cultural resources, facilities, and the environment.

F. Use our best professional judgment and available scientific information to select the lowest risk, most effective IPM method or combination of methods that is feasible for each pest management project. When appropriate, we will include IPM methods in short- and long-term management planning documents such as refuge Comprehensive Conservation Plans, IPM plans, National Environmental Policy Act (NEPA) documents, and invasive species plans. Service IPM planning guidance is on the Internet.

G. Encourage pest management activities that benefit natural resources and provide long-term environmentally sound solutions to pest management problems on and off Service lands. This includes planting native species that promote beneficial species, like native pollinators, and promoting beneficial organisms and natural processes that inherently suppress potential pest populations.

H. Complete necessary environmental documentation and procedures before conducting pest management activities. This may include:
   (1) Preparing Pesticide Use Proposals (PUPs) for approval before applying pesticides,
   (2) Entering pesticide usage information annually into the online IPM and Pesticide Use Proposal System (PUPS) database,
   (3) Conducting Endangered Species Act consultations, and
   (4) Following NEPA requirements.

I. Use and promote pest management research, methods, education, and technical and financial assistance programs to develop, support, and implement IPM strategies.

J. Use appropriate monitoring techniques before, during, and after any IPM activity to determine whether we achieved pest management goals and objectives and if the activity caused any unanticipated impacts.

K. When possible, incorporate IPM principles into procurement activities, contracts, leases, and agreements, including activities such as:
   (1) Cooperative farming,
   (2) Construction,
   (3) Habitat management,
   (4) Fire management,
(5) Grazing,
(6) Forestry,
(7) Operation and maintenance of irrigation systems and dams,
(8) Concessions management,
(9) Road and rights-of-way construction and maintenance,
(10) Public health,
(11) Animal management, and
(12) Fish culture.

1.5 **What is the scope of this policy?** This chapter applies to all pest management activities we conduct, approve, or fund on or off Service lands.

1.6 **When will the Service manage pests?** We will manage pests if:

**A.** The pest causes a threat to human or wildlife health or private property; action thresholds for the pest are exceeded; or Federal, State, or local governments designate the pest as noxious;

**B.** The pest is detrimental to site management goals and objectives; and

**C.** The planned pest management actions will not interfere with achieving site management goals and objectives.

1.7 **How does the Service choose which pest management methods to use?** We choose pest management methods by considering the following in this order of importance:

**A.** Human safety,

**B.** Environmental integrity,

**C.** Effectiveness, and

**D.** Cost.

1.8 **What are the authorities for this chapter?**

**A.** 517 DM 1, Integrated Pest Management Policy.

**B.** Noxious Weed Control and Eradication Act (7 U.S.C. 7701 et seq., Subtitle E).

**C.** Federal Property Management Regulations, Facility Management (41 CFR 102-74.30).

**D.** Agriculture Risk Protection Act (PL 106-224) (supersedes the Federal Noxious Weed Act, except Sections 11 and 15).
E. Executive Order 13112, Invasive Species.


G. National Invasive Species Act (P.L. 104-332).


J. Occupational Safety and Health Act (P.L. 91-596).


L. Federal Water Pollution Control Act (33 U.S.C. 1251 – 1376) (also known as Clean Water Act).


1.9 Who is responsible for IPM?

A. The **Director** approves Servicewide IPM policy.

B. The **Assistant Director – Fisheries and Habitat Conservation**:

   (1) Designates a National IPM Coordinator to coordinate a consistent Servicewide approach to pest management,

   (2) Designates a liaison in the Fisheries program to work closely with the National IPM Coordinator to promote policy compliance and coordination, and

   (3) Ensures the development and distribution of information on innovative and updated pest management techniques.

C. The **Assistant Director – National Wildlife Refuge System**:

   (1) Designates a liaison to work closely with the National IPM Coordinator to ensure the Refuge System’s policy compliance and coordination,

   (2) Supports national IPM activities, including maintenance of the national IPM and PUPS database, and

   (3) Designates an IPM and PUPS database administrator (owner) for the Refuge System.

D. The **Assistant Director – Wildlife and Sport Fish Restoration Program** encourages grantees to implement IPM strategies when managing pest species on projects and lands for which we provide grants.
E. The Assistant Director – External Affairs ensures that the National Conservation Training Center develops and offers IPM and other pesticide-related training.

F. The Assistant Director – Business Management and Operations ensures we incorporate IPM principles into procurement activities, contracts, leases, and agreements.

G. The Regional Directors:

(1) Ensure Regional compliance with this policy.

(2) Designate a Regional IPM Coordinator who informs employees about innovative and new IPM techniques.

(3) Ensure that employees receive training necessary to competently develop and implement IPM programs. Such training may include IPM planning, pesticide applicator certification, and pest species management.

(4) Ensure that performance plans and annual work activity guidance for employees responsible for pest management reflect the goals and objectives of this policy.

(5) Use funds allocated for pest management for appropriate pest management projects.

(6) Ensure that staff keep records of IPM techniques, including use of pesticides, biocontrols, and other pest management tools on lands we manage, and that these records are available as needed.

H. The National IPM Coordinator:

(1) Develops, maintains, and distributes information about innovative and current pest management techniques to Regional personnel.

(2) Attends and helps organize a national IPM workshop annually or as needed. This workshop is for national, Regional, and field staff who participate in IPM activities.

(3) Serves on a Federal IPM Coordination Group with IPM Coordinators from many Federal agencies, including the Environmental Protection Agency, U.S. Department of Agriculture, General Services Administration, Bureau of Land Management, and the National Park Service. Serves on other IPM coordination groups as appropriate.

(4) Approves or disapproves IPM plans and PUPs that require Headquarters review and approval to ensure compliance with applicable laws and other authorities (see section 1.11).

(5) Promotes awareness of and compliance with the Departmental IPM policy to provide a consistent national approach to pest management.

(6) Reviews annual Regional IPM reports, including pesticide use data, generated by the PUPS database.

(7) Coordinates closely with field and Regional staff implementing IPM activities to ensure environmental compliance and to promote the most streamlined procedures and reporting methods.

(8) Works with field and Regional staff implementing IPM to develop updates, as necessary, to
national guidance, including the appropriate review level for different IPM activities (e.g., specific pesticide applications).

I. Regional IPM Coordinators:

(1) Approve or disapprove IPM plans and PUPs requiring their review to ensure compliance with applicable laws and other authorities (see section 1.11). This includes reviewing PUPs in an emergency when an unanticipated outbreak occurs. If a PUP requires Headquarters review, the Regional IPM Coordinator must send it to Headquarters even in an emergency.

(2) Provide the National IPM Coordinator with information concerning pesticide applications or other IPM techniques, when requested.

(3) Coordinate with the National IPM Coordinator when the National IPM Coordinator has to review a PUP from their Region.

(4) Work with the National IPM Coordinator to develop updates, as necessary, to national guidance, including the appropriate review level for different IPM activities (e.g., specific pesticide applications).

(5) Provide Regional personnel with information about environmental hazards and updated pest management techniques.

J. Project Leaders:

(1) Ensure that pest management decisions are consistent with this policy, the pesticide safety policy (242 FW 7), laws, and regulations, including, but not limited to:

(a) Local, State, and Federal requirements for informing employees and visitors of pesticide use,

(b) The Endangered Species Act (for some projects this may include consultation under section 7 of the Act),

(c) NEPA, and

(d) The Federal Insecticide Fungicide and Rodenticide Act (FIFRA).

(2) Develop IPM plans, as appropriate, consistent with NEPA documentation.

(3) Work with the Regional IPM Coordinator to ensure pest management activities use IPM strategies consistent with resource management goals and objectives, such as those stated in Comprehensive Conservation Plans or similar plans.

(4) Promote and encourage IPM practices to land owners and others whose pesticide use may affect Service lands and resources.

(5) Ensure that anyone applying pesticides, releasing biological control agents, and conducting other IPM activities has the appropriate training and equipment necessary to protect their safety and health (also see 242 FW 7).

(6) Ensure we apply pesticides only after the appropriate reviewer (see section 1.11) approves the PUP. We determine who must review and approve PUPs based on pesticide characteristics and its usage pattern. The National IPM Coordinator works with a national team of Regional IPM and
Invasive Species Coordinators to determine the level of review and approval each pesticide receives.

(7) Help establish threshold levels of damage or pest populations according to Service or field station goals and objectives and applicable laws.

(a) Before the treatment, verify that the site has damage levels or pest populations that exceed threshold levels.

(b) After the treatment, determine whether the pest management action achieved the desired results and whether there were any unanticipated or non-target impacts.

(8) Provide the Regional IPM Coordinator with summaries of IPM activities at his/her request.

(9) Ensure that staff store, handle, and dispose of pesticides and pesticide containers in accordance with the label, as required by law, and in a manner that safeguards human, fish, and wildlife health and prevents soil, air, and water contamination.

1.10 What kind of training do employees need before they can apply pesticides?

A. People who apply pesticides on Service lands must have proper training and pesticide certification, as required by Federal and State laws.

B. To purchase, use, or supervise the use of Restricted Use Pesticides, the person must be a Certified Pesticide Applicator (Commercial Applicator), under Section 4 of FIFRA or under the direct supervision of Certified Pesticide Applicator.

(1) A Restricted Use Pesticide is a pesticide product that has a relatively high degree of potential for human or environmental hazard even when it’s used according to label directions.

(2) We encourage people who apply general pesticides (non-Restricted Use Pesticides) or supervise these applications to become Certified Pesticide Applicators (see 242 FW 7), even if certification is not required by law.

1.11 What do employees have to do before applying pesticides? We may only apply pesticides after filling out a PUP and getting PUP approval. A PUP is an online document that identifies important considerations related to a pesticide application (e.g., goals, objectives, IPM techniques, best management practices, pesticide application rates and methods, etc.).

A. The appropriate field station or facility employee must complete a PUP in the online PUPS database. We use the PUPS database to develop, duplicate, submit, review, and approve or disapprove a PUP.

B. PUP reviewer(s) examine the PUP for compliance with applicable regulations to ensure that employees use the least risk and the most specific and effective pesticide(s) to manage the target pest. The National IPM Coordinator works with a national team of Regional IPM and Invasive Species Coordinators to determine the level of review and approval each pesticide receives. The National IPM Coordinator updates this review and approval hierarchy and the resulting pesticide lists as needed.

C. Approvals and disapprovals only apply to the specific application regime, time, location, pesticide, and target pest.
Depending on the PUP, the Project Leader may review and approve it, or he/she may send it to the Regional IPM Coordinator for review and approval. The Regional IPM Coordinator has to send some PUPs to the National IPM Coordinator for review and approval.

Regardless of whether the PUP needs just the approval of the Project Leader or the approval of the Regional or National IPM Coordinator, or both, each approving authority has 30 days to conduct the review (so a PUP that has to go to the National IPM Coordinator could take up to 90 days).

The review period may take longer depending on what changes the PUP may need and the PUP workloads at the different reviewer levels. Also, an expedited PUP review may be necessary when there is an emergency pest outbreak.

Does the Service require IPM plans for pesticide applications? No. We encourage employees engaging in pest management practices to include a separate pest management plan or incorporate IPM strategies into other resource planning documents (e.g., Comprehensive Conservation Plans, Environmental Assessments, and Environmental Impact Statements). When developing an IPM plan, we encourage employees to ensure it conforms to the parameters of an Environmental Assessment or Environmental Impact Statement, as appropriate. Doing this benefits Project Leaders because they may receive multi-year approvals of certain proposed pesticide uses that would normally require Regional or national level review.

What is the relationship among IPM plans, Comprehensive Conservation Plans, and NEPA? Employees must develop the appropriate level of NEPA documentation (conforming to the parameters of a categorical exclusion, Environmental Assessment, or Environmental Impact Statement) and provide public involvement, as needed, when they develop IPM plans. If you have identified, addressed, and authorized specific pest management strategies in a Comprehensive Conservation Plan and fully evaluated these strategies in the Comprehensive Conservation Plan’s NEPA document, you do not need further NEPA documentation. For more information on NEPA compliance, see Departmental and Service NEPA guidance in 516 DM 6, Appendix 1 and 550 FW 3.

For information on the content of this chapter, contact the Division of Environmental Quality. For more information about this Web site, contact Krista Holloway in the Division of Policy and Directives Management.