



Transmittal Number PT 18-063	Date July 2018
Publication Title / Publication Number <i>Environmental Manual M 31-11.19</i>	
Originating Organization Development Division, Environmental Services Office	

Remarks and Instructions

For updating printed manuals, page numbers indicating portions of the manual that are to be removed and replaced are shown below.

Chapter	Remove Pages	Insert Pages
Title Page	1 – 2	1 – 2
Contents	5 – 12	5 – 12
Chapter 457 Section 4(f) Evaluation	457-1 – 457-10	457-1 – 457-10

The complete manual, revision packages, and individual chapters can be accessed at www.wsdot.wa.gov/publications/manuals/m31-11.htm.

Please contact Ashley Carle at 360-705-7493 or carleas@wsdot.wa.gov with comments, questions, or suggestions for improvement to the manual.

To get the latest information, please sign up for email updates for individual publications at www.wsdot.wa.gov/publications/manuals.

Washington State Department of Transportation
Environmental Services Office
PO Box 47331
Olympia, WA 98504



**Washington State
Department of Transportation**

Environmental Manual

M 31-11.18

June 2018

Engineering and Regional Operations
Development Division, Environmental Services Office

Americans with Disabilities Act (ADA) Information

English

Title VI Notice to Public It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at 360-705-7090.

Americans with Disabilities Act (ADA) Information This material can be made available in an alternate format by emailing the Office of Equal Opportunity at wsdotada@wsdot.wa.gov or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

Spanish

Notificación de Título VI al Público Es la póliza de el Departamento de Transportes del Estado de Washington de asegurar que ninguna persona sea excluida de participación o sea negado los beneficios, o sea discriminado bajo cualquiera de sus programas y actividades financiado con fondos federales sobre la base de raza, color, origen nacional o sexo, como proveído por el Título VI de el Acto de Derechos Civiles de 1964. Cualquier persona que cree que sus protecciones de Título VI han sido violadas, puede hacer una queja con la Oficina de Igualdad de Oportunidades (OEO). Para información adicional con respecto a procedimientos de quejas de Título VI y/o información con respecto a nuestras obligaciones sin discriminación, por favor de comunicarse con el Coordinador de Título VI de la Oficina de Igualdad de Oportunidades (OEO) 360-705-7090.

Información del Acta Americans with Disabilities Act (ADA)

Este material es disponible en un formato alternative. Envíe su petición por correo electrónico al equipo de Oficina de Igualdad de Oportunidades (OEO) en wsdotada@wsdot.wa.gov o llamando gratis, 855-362-4ADA (4232). Personas sordas o con problemas de audición pueden solicitar llamando el relé de estado de Washington al 711. For public events (like Open Houses, etc) English Accommodation requests for people with disabilities can be made by contacting the WSDOT Diversity/ADA Affairs team at wsdotada@wsdot.wa.gov or by calling toll-free, 855-362-4ADA (4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711. Spanish Solicitudes de alojamiento para personas con discapacidad pueden hacer comunicándose con el equipo de Asuntos de diversidad/ADA WSDOT en wsdotada@wsdot.wa.gov o llamando al número gratuito, 855-362-4ADA (4232). Personas sordas o con problemas de audición pueden solicitar llamando el relé del estado de Washington al 711.

To get the latest information on WSDOT publications, sign up for individual email updates at www.wsdot.wa.gov/publications/manuals.

Washington State Department of Transportation
Environmental Services Office
PO Box 47408
Olympia, WA 98504-7310

Environmental Manual Coordinator
360-705-7493
carleas@wsdot.wa.gov

Chapter 100	Purpose and Overview	100-1
Chapter 200	Transportation Planning	200-1
200.01	Environmental Considerations in Transportation Planning	200-1
Chapter 300	Project Scoping and Programming	300-1
300.01	Introduction and Overview	300-1
300.02	Project Scoping	300-2
300.03	Project Classification	300-3
300.04	NEPA Classifications	300-3
300.05	SEPA Classifications	300-5
300.06	Revision of Project Scope and Classification	300-6
300.06(1)	NEPA Reclassification	300-6
300.06(2)	SEPA Reclassification	300-6
300.07	Highways Over National Forest Lands	300-6
300.08	Environmental Database Resources	300-6
300.08(1)	WSDOT's GIS Workbench	300-6
300.08(2)	Expansion of GIS Workbench	300-7
300.08(3)	Citing a GIS Database	300-7
300.09	Applicable Statutes and Regulations	300-7
300.10	Abbreviations and Acronyms	300-8
300.11	Glossary	300-8
Chapter 400	Environmental Review (NEPA/SEPA) and Transportation Decision Making	400-1
400.01	Defining a Transportation Project for Environmental Review	400-1
400.02	Roles and Responsibilities	400-2
400.02(1)	Lead Agencies	400-2
400.02(2)	Cooperating/Consulted Agencies	400-3
400.02(3)	Participating Agencies	400-4
400.02(4)	Tribal Participation	400-5
400.02(5)	Public Involvement / Community Engagement	400-5
400.02(6)	WSDOT Internal Roles and Responsibilities	400-8
400.03	Identifying the Type of Environmental Document	400-9
400.04	NEPA/SEPA Procedures	400-9
400.05	Ensuring Environmental Document Quality	400-10
400.05(1)	Document Standards and Plain Talk	400-10
400.05(2)	Publication Standard Messages	400-11

400.06	Using Existing Environmental Documents	400-11
400.06(1)	Re-evaluations.	400-11
400.06(2)	Supplemental Documents	400-13
400.06(3)	Using NEPA Documents for SEPA.	400-14
400.07	Documenting an Environmental Impact Statement (EIS)	400-14
400.07(1)	Scoping Process	400-14
400.07(2)	Draft Environmental Impact Statement (DEIS)	400-17
400.07(3)	Final EIS (FEIS)	400-19
400.07(4)	Record of Decision (ROD)	400-20
400.08	Documenting an Environmental Assessment (EA) or SEPA Checklist.	400-20
400.08(1)	NEPA Environmental Assessments.	400-20
400.08(2)	SEPA Threshold Determination (SEPA Checklist).	400-21
400.09	Categorical Exclusions/Exemptions (CE)	400-21
400.09(1)	NEPA CEs (Categorical Exclusions)	400-22
400.09(2)	SEPA CEs (Categorical Exemptions)	400-22
400.10	Environmental Document Legal Considerations	400-22
400.10(1)	Statute of Limitations	400-22
400.10(2)	Administrative Record	400-23
400.11	Applicable Statutes and Regulations	400-25
400.11(1)	National Environmental Policy Act (NEPA)	400-25
400.11(2)	Other Federal Environmental Statutes	400-25
400.11(3)	State Environmental Policy Act (SEPA).	400-26
400.12	Abbreviations and Acronyms.	400-26
400.13	Glossary	400-27
Chapter 412	Indirect and Cumulative Impacts	412-1
412.01	Introduction	412-1
412.02	Summary of Requirements	412-1
412.03	Type of Impacts Included in the Cumulative Impacts Analysis.	412-4
412.04	Analyzing Cumulative Impacts	412-4
412.05	Climate Change and Greenhouse Gases	412-5
412.06	Case Law and Cumulative Impacts Analysis.	412-5
412.07	Additional Resources of Indirect and Cumulative Effects.	412-6
412.08	Applicable Statutes and Regulations	412-7
412.09	Glossary	412-7
Chapter 420	Earth (Geology and Soils)	420-1
420.01	Summary of Requirements for Geology and Soils	420-1
420.02	Resources for Analyzing Geology and Soils Impacts	420-2
420.03	Applicable Statues and Regulations.	420-2
420.03(1)	Federal.	420-2
420.03(2)	State and Local	420-2

Chapter 425	Air	425-1
425.01	Air Quality Overview	425-1
425.02	Conformity Requirements	425-1
	425.02(1) Exempt Projects	425-2
	425.02(2) Region-Level Analysis	425-2
	425.02(3) Project-Level Analysis	425-2
425.03	NEPA Requirements	425-3
	425.03(1) Criteria Pollutants	425-4
	425.03(2) Mobile Source Air Toxics (MSATs)	425-4
	425.03(3) Greenhouse Gas Emissions (GHG)	425-4
	425.03(4) Temporary Construction Emissions	425-4
	425.03(5) Fugitive Dust	425-4
425.04	Modeling Requirements	425-5
425.05	Air Quality Permits and Approvals	425-5
425.06	Multi-Modal and Non-Road Air Quality Requirements	425-5
425.07	Air Quality Statutes, Regulations, and Guidance	425-5
	425.07(1) Federal	425-5
	425.07(2) State	425-6
	425.07(3) Regional	425-6
425.08	Abbreviations and Acronyms	425-6
425.09	Glossary	425-7
Chapter 430	Surface Water Quality	430-1
430.01	Surface Water Quality Requirements	430-1
430.02	Analyzing Surface Water Impacts	430-2
430.03	303(d) and TMDL Impaired Water Bodies	430-3
430.04	Surface Water Interagency Agreements	430-4
430.05	Water Quality Permits and Approvals	430-4
	430.05(1) Federal	430-4
	430.05(2) State	430-5
	430.05(3) Local	430-5
430.06	Non-Road Project Surface Water Requirements	430-5
	430.06(1) Ferries	430-5
	430.06(2) Airports, Rail, and Nonmotorized Facilities	430-5
430.07	Surface Water Quality Resource Materials	430-6
430.08	Applicable Statutes and Regulations	430-6
	430.08(1) Federal	430-6
	430.08(2) State	430-7
	430.08(3) Tribal	430-7
430.09	Abbreviations and Acronyms	430-8
430.10	Glossary	430-9

Chapter 431	Wetlands	431-1
431.01	Wetlands and Other Waters	431-1
431.02	Assessing Wetlands and Other Waters	431-2
431.03	Identifying Impacts to Wetlands and Other Waters	431-3
431.04	Mitigating for Impacts to Wetlands and Other Waters	431-3
431.04(1)	Selecting a Compensatory Mitigation Option	431-4
431.04(2)	Developing Detailed Mitigation Plans	431-5
431.04(3)	Joint Aquatic Resources Permit Application (JARPA) Submittals and Final Plan Development	431-6
431.05	Policies, Regulations, and Agreements	431-6
431.05(1)	Policies	431-6
431.05(2)	Federal Statutes and Regulations	431-6
431.05(3)	State Statutes and Regulations	431-7
431.05(4)	Local Requirements	431-7
431.06	Abbreviations and Acronyms	431-7
431.07	Glossary	431-7
Chapter 432	Floodplains	432-1
432.01	Summary of Floodplain Requirements	432-1
432.02	Applicable Statutes and Regulations	432-1
432.02(1)	National Environmental Policy Act/State Environmental Policy Act	432-1
432.02(2)	Endangered Species Act	432-2
432.02(3)	Floodplain Management	432-2
432.02(4)	Flood Control Management Act	432-2
432.02(5)	Local Ordinances	432-2
432.03	Governor’s Directive on Acquisitions of Agricultural Resource Land	432-4
432.04	WDFW Memorandum of Agreement (MOA) for Transportation Activities	432-4
432.05	Floodplain Discipline Report	432-4
432.06	FHWA Floodplain Technical Advisory	432-5
432.07	FHWA Federal-Aid Highway Program Policy & Guidance Center	432-5
432.08	Flood Emergency Procedures	432-6
432.09	Flood Control Assistance Account Program (FCAAP)	432-6
432.10	Floodplain Permits and Approvals	432-6
432.11	Non-Road Project Requirements	432-6

432.12	Floodplain Resources	432-7
432.12(1)	Comprehensive Flood Hazard Management Plans	432-7
432.12(2)	Local Floodplain Management	432-7
432.12(3)	Emergency Relief Procedures Manual M 3014	432-7
432.12(4)	Climate Change	432-7
432.12(5)	WSDOT GIS Workbench	432-8
432.13	Abbreviations and Acronyms	432-9
432.14	Glossary	432-9
Chapter 433	Groundwater	433-1
433.01	Summary of Requirements for Groundwater	433-1
433.02	Groundwater Policy Guidance	433-2
433.02(1)	State Source Water Assessment and Protection Programs Guidance	433-2
433.03	Groundwater Related Interagency Agreements	433-2
433.03(1)	Sole Source Aquifers	433-2
433.03(2)	Drinking Water Well Sanitary Control Areas – Screening Criteria	433-2
433.04	Applicable Statutes and Regulations	433-3
433.04(1)	Federal	433-3
433.04(2)	State and Local	433-3
433.05	Abbreviations and Acronyms	433-4
433.06	Glossary	433-5
Chapter 436	Fish, Wildlife, and Vegetation	436-1
436.01	Fish, Wildlife, and Vegetation Policies and Regulations	436-1
436.02	Addressing Fish, Wildlife, and Vegetation in the NEPA/SEPA Process	436-1
436.03	Working With Endangered and Threatened Species	436-2
436.03(1)	Maintenance Activities and the ESA Section 4(d) Rule	436-3
436.03(2)	ESA Section 7 Compliance	436-3
436.03(3)	ESA Section 9 Compliance	436-6
436.04	Working on Public Lands	436-6
436.05	Protecting Birds	436-7
436.06	Considering Fisheries Resources	436-8
436.07	Protecting Marine Mammals	436-9
436.08	Habitat Considerations	436-9
436.09	Coordinating With Tribes on Fish, Wildlife, and Vegetation Resources	436-10
436.10	Mitigation and Other Policies	436-10
436.11	Abbreviations and Acronyms	436-11
436.12	Glossary	436-12

Chapter 440	Energy	440-1
	440.01 Energy Background	440-1
	440.02 Documentation and Modeling Requirements	440-1
	440.02(1) Affected Environment	440-1
	440.02(2) Energy Consumption	440-2
	440.02(3) Greenhouse Gas Emissions	440-2
	440.02(4) Conservation Measures and Mitigation	440-2
	440.03 Applicable Statutes, Regulations, and Guidance	440-3
	440.03(1) Federal	440-3
	440.03(2) State	440-3
	440.04 Non-Road Project Requirements	440-3
	440.05 Abbreviations and Acronyms	440-3
	440.06 Glossary	440-4
Chapter 446	Noise	446-1
	446.01 Traffic Noise Background	446-1
	446.02 Traffic Noise Requirements	446-1
	446.03 Noise Technical and Policy Guidance	446-2
	446.03(1) WSDOT Guidance	446-2
	446.03(2) FHWA Guidance	446-2
	446.04 Noise Permits and Approvals	446-4
	446.05 Noise Considerations for Non-Highway Projects	446-4
	446.05(1) FTA lead/co-lead projects	446-4
	446.05(2) FRA Lead/Co-Lead Projects	446-4
	446.05(3) WSF Projects	446-4
	446.05(4) WSDOT Airports	446-4
	446.06 Applicable Statutes and Regulations	446-5
	446.07 Abbreviations and Acronyms	446-5
	446.08 Glossary	446-6
Chapter 447	Hazardous Materials (HazMat) and Solid Waste	447-1
	447.01 Considering HazMat During the Project Lifecycle	447-1
	447.02 Determining Suitable HazMat Documentation from the ERS	447-1
	447.03 Writing and Right-Sizing HazMat Analysis	447-2
	447.04 Identifying Potentially Contaminated Property	447-3
	447.04(1) Phase I Environmental Site Assessment (Phase I ESA)	447-3
	447.04(2) Phase II Environmental Site Assessment (Phase II ESA)	447-4
	447.05 Managing Liability During Real Estate Acquisition	447-5
	447.06 Planning for Sediment Management	447-6

447.07	Using Construction Specifications and Provisions	447-6
447.07(1)	Identifying and Reporting HazMat During Construction	447-7
447.07(2)	Encountering Unknown Underground Storage Tanks (USTs)	447-7
447.07(3)	Finding Releases of Unknown HazMat	447-8
447.07(4)	Responding to Spills From Construction Activities	447-9
447.07(5)	Reporting Spills Caused by the Traveling Public (Third-Party)	447-9
447.08	Managing HazMat During Construction	447-11
447.09	Reusing or Disposing of Project Waste Materials	447-12
447.10	Laws and Regulations	447-13
447.10(1)	Federal Laws and Regulations	447-13
447.10(2)	State Regulations	447-13
447.11	Abbreviations and Acronyms	447-13
447.12	Glossary	447-14
Chapter 455	Land Use and Transportation	455-1
455.01	Land Use, Transportation and Practical Solutions	455-1
455.01(1)	Advisory Team Roles and Responsibilities	455-2
455.02	Requirements for Land Use Analysis	455-2
455.03	Requirements for Transportation Analysis	455-3
455.04	Coordination with Federal Agencies other than FHWA	455-4
455.04(1)	Waterborne Navigation and Ferry Facilities	455-4
455.04(2)	Rail Facilities	455-5
455.04(3)	Aviation Facilities	455-6
455.05	Documenting Land Use Analysis for Legal Sufficiency under NEPA	455-6
455.06	Bicycling and Pedestrian Facilities	455-7
455.07	Transit	455-8
455.08	Farmland	455-8
455.08(1)	Farmland and Mitigation Sites	455-9
455.08(2)	State Conservation Commission Memorandum of Understandings	455-9
455.09	Resource Conservation Areas	455-9
455.10	Recreational Land Conversions Section 6(f)	455-10
455.10(1)	Section 6(f) Reviews	455-10
455.10(2)	Other Grant Funded Properties	455-12
455.11	Wild and Scenic Rivers	455-13
455.11(1)	National Rivers Inventory	455-14
455.11(2)	Washington State Scenic River System	455-14
455.12	Statutes and Regulations	455-14
455.13	Abbreviations and Acronyms	455-15
455.14	Glossary	455-16

Chapter 456	Cultural Resources	456-1
456.01	Cultural Resources Overview	456-1
456.02	Section 106 Review and Compliance: FHWA	456-3
456.03	Section 106 Review and Compliance: Federal Lands	456-5
456.04	Section 106 Review and Compliance: COE	456-5
456.05	Section 106 Review and Compliance: Other Federal Agencies	456-5
456.06	Governor’s Executive Order 05-05 Review and Compliance	456-7
456.07	Bridge Compliance	456-11
456.08	Artifact Collection and Disposition (Curation)	456-15
456.08(1)	Factors in Determining a Curation Facility	456-15
456.08(2)	Disposition of Archaeological Artifacts and Records From State Land, Federal Land, or Tribal Land	456-15
456.08(3)	Submitting Collections to the Selected Curation Facility	456-17
456.09	Use of Museums and Information Centers as Potential Mitigation	456-17
456.09(1)	Exhibits/Displays	456-17
456.09(2)	Stand-Alone Facilities	456-18
456.10	Additional Cultural Resource Regulatory Guidance	456-18
456.10(1)	Federal	456-18
456.10(2)	State	456-19
456.11	Acronyms and Abbreviations	456-20
456.12	Glossary	456-20
Chapter 457	Section 4(f) Evaluation	457-1
457.01	Section 4(f) Requirements	457-1
457.02	Identifying a Section 4(f) Property	457-2
457.03	Individual Section 4(f) Compliance	457-3
457.03(1)	De Minimis Section 4(f) Evaluations	457-3
457.03(2)	Programmatic Section 4(f) Evaluations	457-3
457.04	Cultural Resources May Be Protected Under Section 4(f)	457-7
457.05	Railroads and Rail Transit Lines	457-7
457.06	Section 6(f) Conversion May Be Required	457-8
457.07	Section 4(f) Requirements May Differ for Other Federal Agencies	457-8
457.08	Procedures for Completing a Section 4(f) Analysis	457-8
457.09	Section 4(f) and Related Statutes	457-8
457.10	Abbreviations and Acronyms	457-9
457.11	Glossary	457-9

Chapter 458	Social and Community Effects	458-1
458.01	Social and Community Effects Analysis	458-1
458.02	Equity Effects – Environmental Justice	458-5
458.03	Social and Community Effects	458-6
458.04	Economic Effects	458-7
458.05	Relocation Impacts	458-8
458.06	Public Services and Utilities	458-9
458.07	Public Involvement Requirements – LEP	458-10
	458.07(1) Limited English Proficiency – LEP	458-10
458.08	Coordination with Tribal Governments	458-11
458.09	Completing a Social and Community Effects Analysis	458-11
458.10	Non-Road Project Requirements	458-11
458.11	Links to Social Analysis Statutes and Regulations	458-12
458.12	Abbreviations and Acronyms	458-12
458.13	Glossary	458-12
Chapter 459	Visual Impacts	459-1
459.01	Visual Impacts Analysis Requirements	459-1
	459.01(1) Why we do visual analysis	459-1
	459.01(2) Summary of Requirements	459-1
459.02	Non Road Project Requirements	459-3
459.03	Applicable Statutes and Regulations	459-4
	459.03(1) Federal	459-4
	459.03(2) State	459-5
459.04	Glossary	459-5
Chapter 490	Tracking Environmental Commitments During Design	490-1
490.01	Commitments Must Be Tracked	490-1
490.02	Identify Environmental Commitments During Environmental Review and Design	490-1
490.03	Perform a Constructability Review	490-2
490.04	Project Design Must Reflect Environmental Commitments	490-2
490.05	Procedures for Tracking Commitments During Design	490-2
490.06	Links to Related Statutes	490-3
490.07	Abbreviations and Acronyms	490-3
490.08	Glossary	490-3

Chapter 500	Environmental Permitting	500-1
500.01	Introduction	500-1
500.02	Permit Overview	500-2
500.03	Roles and Responsibilities	500-3
500.03(1)	Resource Agencies	500-3
500.03(2)	Environmental Manager/Assistant Manager/Supervisors.	500-3
500.03(3)	Project Environmental Coordinator	500-3
500.03(4)	WSDOT Environmental Technical Experts (Headquarters, Regions, and Modes)	500-4
500.03(5)	Design Team	500-4
500.03(6)	ESO Compliance Solutions Branch	500-4
500.03(7)	Regional Maintenance Environmental Coordinator (RMEC)/ Maintenance Staff	500-4
500.04	Identify the Required Permits Through Early Coordination	500-5
500.05	Seek Permit Streamlining Options and Provide Schedule Input	500-5
500.06	Submit a Complete Permit Application and Obtain Permits	500-6
500.07	Review and Manage Permits During PS&E	500-7
500.08	Manage Permits and Conditions During Construction	500-7
500.09	Permitting Procedures	500-8
500.10	Links to Permitting Resources.	500-8
500.11	Abbreviations and Acronyms.	500-8
500.12	Glossary	500-9
Chapter 530	Tribal Approvals	530-1
530.01	WSDOT Policy for Working With Tribes	530-1
530.02	Treaty Rights	530-1
530.03	Section 401 Water Quality Certification by Tribes	530-2
530.04	Section 106 Consultation.	530-2
530.05	Archaeological Resources Protection Act Permit	530-2
530.06	Hydraulic Project Approval	530-3
530.07	Tribal Law	530-3
530.08	Permit Assistance.	530-3
Chapter 590	Incorporating Environmental Commitments Into Contracts	590-1
590.01	WSDOT’s Contracts Must Reflect the Environmental Commitments	590-1
590.02	Procedures for Incorporating Commitments Into Contracts	590-1
590.03	Glossary	590-2

Chapter 600	Construction	600-1
600.01	Construction Overview	600-1
600.02	Roles and Responsibilities	600-2
600.02(1)	WSDOT Region/Mode Environmental Manager (REM)	600-2
600.02(2)	WSDOT Construction Project Engineer (PE)	600-2
600.02(3)	WSDOT Environmental Coordinator and/or Project Office Inspector	600-2
600.02(4)	WSDOT Environmental Technical Experts (Regions, Modes, and Headquarters)	600-3
600.02(5)	Regulatory Agencies	600-3
600.02(6)	WSDOT Environmental Services Office (Headquarters)	600-4
600.03	Construction Compliance Expectations	600-4
600.04	Procedures for Construction	600-4
600.05	Abbreviations and Acronyms	600-4
600.06	Glossary	600-5
Chapter 610	Preparation for Construction	610-1
610.01	Prepare a Compliance Binder or Notebook for the Project	610-1
610.02	Discuss Environmental Compliance at the Pre-Construction Meeting	610-1
610.03	Verify Contractor and WSDOT Credentials	610-2
610.04	Take Environmental Training	610-2
610.05	Provide Notifications and Submittals to Resource Agencies	610-3
610.06	Mark Clearing Limits and Protect Sensitive Areas	610-3
610.07	Procedures for Construction	610-4
610.08	Abbreviations and Acronyms	610-4
610.09	Glossary	610-4
Chapter 620	During Construction	620-1
620.01	Introduction	620-1
620.02	Air	620-1
620.03	Cultural and Historic	620-1
620.04	Earth (Geology and Soils)	620-2
620.05	Fish, Wildlife, and Vegetation	620-2
620.06	Hazardous Materials (HazMat)	620-3
620.07	Noise	620-3
620.08	Public Services and Utilities	620-3
620.09	Transportation and Traffic	620-4
620.10	Water Quality	620-4
620.11	Wetlands and Other Waters	620-5
620.12	Enforce the Contract During Construction	620-5
620.13	Respond to Project Modifications	620-5
620.14	Respond to Noncompliance	620-6

620.15	Procedures for Construction	620-6
620.16	Abbreviations and Acronyms.....	620-6
620.17	Glossary	620-6
620.18	Exhibits	620-6
Chapter 630	Construction Close Out for Environmental.....	630-1
630.01	Close Commitments Upon Completion.....	630-1
630.02	Prepare As-Built Reports for Wetland and Stream Mitigation Efforts ...	630-1
630.03	Initiate Post Construction Wetland Mitigation Monitoring	630-1
630.04	Coordinate Long-Term Maintenance.....	630-1
630.05	Procedures for Close Out of Construction Commitments	630-2
630.06	Abbreviations and Acronyms.....	630-2
630.07	Glossary	630-2
Chapter 700	Maintenance and Operations	700-1
700.01	Environmental Requirements for Maintenance and Operations	700-1
	700.01(1) Project Management Phases and Maintenance	700-1
700.02	WSDOT Maintenance and Operation Plans and Policies	700-2
700.03	Interagency Agreements for Maintenance Activities.....	700-3
	700.03(1) MOA Between WDFW and WSDOT – July 2016	700-3
	700.03(2) Implementing Agreement – Alternative Mitigation Policy Guidance for Aquatic Permitting	700-3
	700.03(3) MOU on Preservation of Agricultural and Forest Lands ...	700-3
	700.03(4) MOU on Highways Over National Forest Lands	700-3
700.04	Permits and Approvals	700-4
700.05	WSDOT Manuals.....	700-4
700.06	Abbreviations and Acronyms.....	700-5
Chapter 800	Property Management and Disposal	800-1
800.01	Overview	800-1
800.02	Environmental Commitments for Utilities Accommodation.....	800-1
	800.02(1) Accommodation of Utility Facilities within State Highway Right of Way	800-1
	800.02(2) Utility Work Performed as part of WSDOT Projects	800-2
800.03	Environmental Considerations in Real Property Disposal/Lease	800-2
800.04	Environmental Considerations in Disposal of Pit Sites.....	800-4
800.05	Environmental Considerations for Changes in Limited Access	800-4
800.06	Statutes and Regulations	800-5
800.07	Abbreviations and Acronyms.....	800-5
800.08	Glossary	800-5
Appendix A	Executive Orders	A-1
Appendix B	Interagency Agreements	B-1
Appendix C	Letters, Memos and Directives	C-1

457.01	Section 4(f) Requirements
457.02	Identifying a Section 4(f) Property
457.03	Individual Section 4(f) Evaluations
457.04	Cultural Resources May Be Protected Under Section 4(f)
457.05	Section 6(f) Conversion May Be Required
457.06	Section 4(f) Requirements May Differ for Other Federal Agencies
457.07	Procedures for Completing Section 4(f) Analysis
457.08	Section 4(f) and Related Statutes
457.09	Abbreviations and Acronyms
457.10	Glossary

447.01 Section 4(f) Requirements

Section 4(f) of the Department of Transportation Act of 1966 declares a national policy to “preserve the natural beauty of the countryside, public park and recreation land, wildlife and waterfowl refuges, and historic sites.” It is one of the most stringent and complex environmental laws related to transportation. As a result, Section 4(f) is also one of the most frequently litigated environmental statutes and the most common cause of court injunctions delaying projects (FHWA *Success in Stewardship* Newsletter, March 2008).

Fixing Americans Surface Transportation Act (FAST Act) was passed in 2015. Section 1301 of the FAST Act (23 U.S.C. 138(c) and 49 U.S. C. 3030(e)) creates an optional alternative process for compliance with Section 4(f). The optional process requires additional concurrence points with other Federal agencies and does not appear to provide a streamlining benefit. Therefore, WSDOT will continue to follow current standard practices for Section 4(f) compliance.

WSDOT’s policy is to follow the [FHWA Section 4\(f\) guidance](#) provided on their environmental webpage. This manual summarizes that guidance for the more common types of projects.

Section 4(f) is a federal requirement and must be considered in any NEPA document involving any USDOT agency (FHWA, FTA, FRA, and FAA (see [Section 447.07](#))). This work may be:

- Included in the EIS/EA and supported by appropriate documentation.
- Conducted separately and documented in an Individual Section 4(f) Evaluation.

FHWA and other USDOT agencies may not approve a transportation program or project that uses such properties unless:

- The use will have no more than *de minimis* impact.
- There is no feasible and prudent alternative and all possible planning has been done to minimize harm.

To secure federal approval and funding for transportation projects that use Section 4(f) properties, WSDOT must demonstrate that:

- There are unique problems or unusual factors that prohibit use of alternatives that avoid these properties.
- The cost of alternatives that avoid these properties is extraordinary.
- The social, economic and environmental impacts or community disruption resulting from an alternative that avoids Section 4(f) properties reach an extraordinary magnitude.

The law also protects Section 4(f) properties from proximity impacts that substantially diminish the use or value of the resource. Substantial proximity impacts are considered to be a “Constructive Use” even though the project does not actually intrude into the protected area. FHWA requires a Section 4(f) Evaluation be completed for proximity impacts. Such impacts may include:

- Noise
- Vibrations
- Aesthetics
- Access

447.02 Identifying a Section 4(f) Property

Section 4(f) applies to significant publicly owned public parks and recreation areas and wildlife and waterfowl refuges. Parks and recreation areas must be open to the public to qualify, but wildlife and waterfowl refuges may restrict access to preserve quality habitat. Privately owned properties may qualify for consideration under Section 4(f) if a government agency has a permanent interest in the land (such as an easement).

Publicly owned parks, recreation areas and wildlife and waterfowl refuges are assumed to be significant unless the public official with jurisdiction concludes that the entire site is not significant. FHWA must conduct an independent evaluation of the property and concur with the official’s decision.

Historic sites of national, state or local significance qualify as Section 4(f) properties regardless of ownership or public access. Historic sites must be on or eligible for inclusion on the National Register of Historic Places to be protected.

You are probably dealing with a Section 4(f) property if you impact a property that:

- Is publicly owned.
- Open to the public during normal hours of operation.
- Serves recreation activities (walking, hiking, bird watching, or organized sports) as a major purpose as stated in the area’s master plan (consultation with the officials with jurisdiction is required to confirm the property’s status).

or

- Is listed on the National Register of Historic Places.

447.03 Individual Section 4(f) Compliance

WSDOT policy requires Section 4(f) consideration in any NEPA document. However, not all NEPA actions require a full Section 4(f) evaluation. If the proposed project will not use Section 4(f) property, the NEPA document needs to document the research and explain that Section 4(f) does not apply. Right size your document to fit your project. Three approaches are typically used:

- An individual Section 4(f) Evaluation, which can be done as part of a NEPA EIS or separately in support of an EA or CE.
- A programmatic Section 4(f) Evaluation in support of an EA or CE.
- A determination is made that the project has *de minimis* impacts and officials with jurisdiction concur in writing.

The flowchart in [Exhibit 447-1](#) shows the basic steps for a Section 4(f) Evaluation. Step by step guidance for how to complete this process is provided on the [WSDOT Section 4\(f\) Guidance](#) webpage.

447.03(1) *De Minimis* Section 4(f) Evaluations

In 2005, Section 6009(a) of the SAFETEA-LU Act allowed FHWA to streamline the Section 4(f) evaluation process for projects that have *de minimis* impacts. *De minimis* impacts are defined as impacts that will not adversely affect the features, attributes or activities that qualify the parks, recreation areas, or refuges for protection.

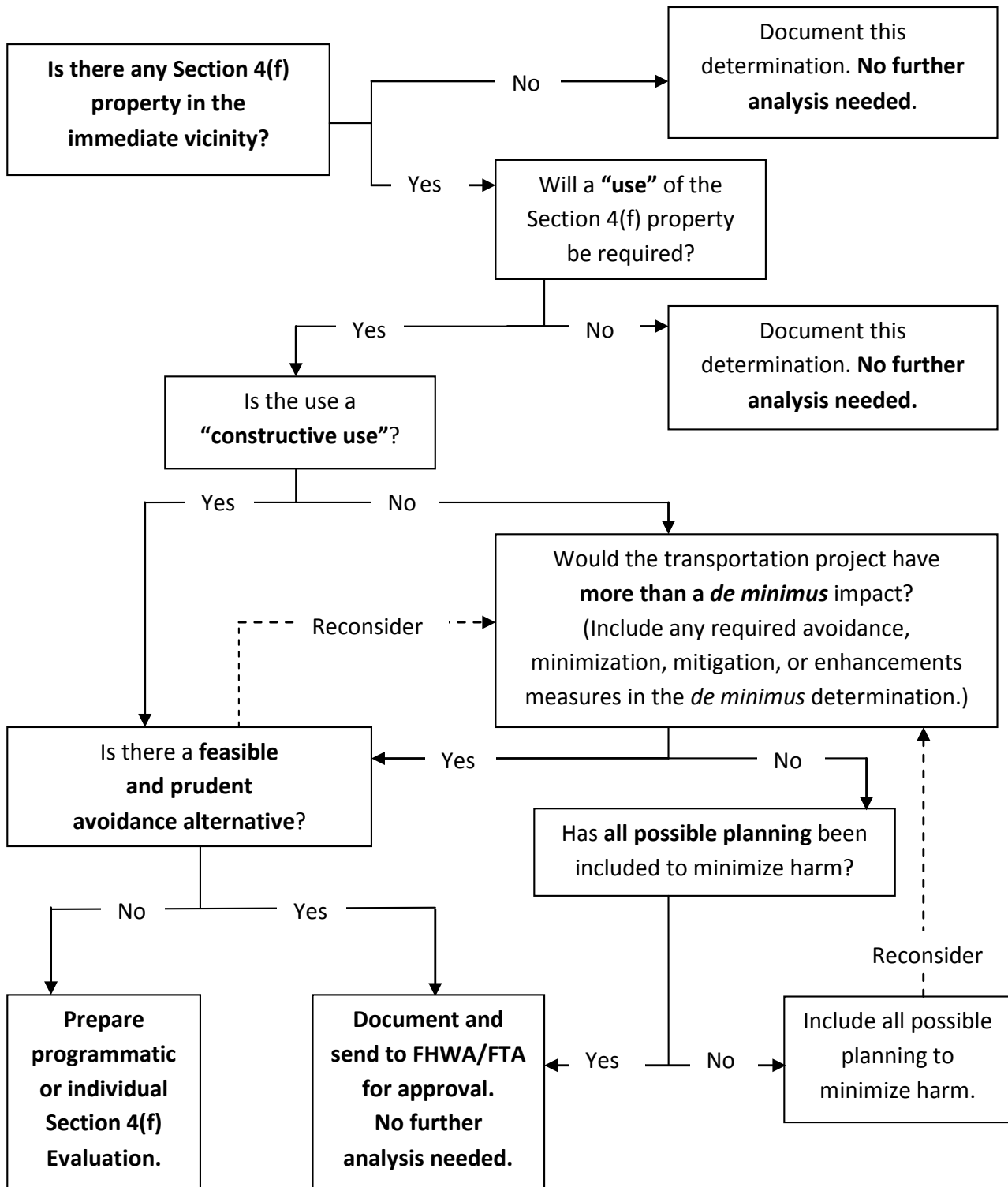
Measures to avoid, minimize, or mitigate impacts or enhance the resource should be considered before the *de minimis* determination is made. FHWA makes the determination based on a review of the project documentation. Detail the work that was done to reach the *de minimis* determination in the NEPA document. Written concurrence from the officials with jurisdiction must be included in the document. The process for determining a *de minimis* impact is shown on the flowchart on the [WSDOT Section 4\(f\) Guidance](#) webpage.

The public must be informed of the *de minimis* determination and given an opportunity to comment on the decision. This may be done as part of the NEPA process for an EA or EIS. If your project is a CE it can be accomplished in a newsletter, city council meeting or project open house. Standard language must be included in this notice. A template for documenting public involvement at a city council meeting can be found on the [WSDOT Section 4\(f\) Guidance](#) webpage.

447.03(2) Programmatic Section 4(f) Evaluations

FHWA developed five Programmatic Section 4(f) Evaluations that can be used to streamline the evaluation process. Using programmatic saves time by eliminating circulation of the draft, and by the completion of a legal sufficiency review and coordination with other federal agencies (DOI, USDA, and HUD). Coordination with the Official with Jurisdiction is still required. FHWA provides more detailed explanation of each of the [Nationwide Section 4\(f\) Programmatic Evaluation](#) categories on their webpage. If the project impacts a Section 4(f) property and it does not qualify for a programmatic evaluation, then an individual Section 4(f) Evaluation must be completed.

Exhibit 447-1 Determining the Type of Section 4(f) Evaluation



The description and criteria for the five Programmatic Section 4(f) Evaluations are:

1. **Independent Walkway and Bikeways** – Only applies to independent bikeway or walkway projects that impact recreation and park areas for active recreation and open space. The official with jurisdiction over the Section 4(f) property must give his/her approval in writing that the project is acceptable and consistent with the designated use and that all possible planning to minimize harm has been done.

This programmatic cannot be used if the project would require the use of:

- Critical habitat of endangered species.
- Land from a publicly owned wildlife or waterfowl refuge.
- Land from a historical site of local, state or national significance.
- Unusual circumstances such as major impacts, adverse effects or controversy.

2. **Historic Bridges** – Applies to bridges to be replaced or rehabilitated with Federal Funds. The bridge must be on or eligible for the National Register of Historic Places (NRHP). The FHWA Division Administrator concurs with the facts presented in the alternatives, findings and mitigation.

The FAST Act exempts common post 1945 bridges from Section 4(f) to align with requirement of Section 106 of the National Historic Preservation Act (Sec 1303, 23 USC 138(e)).

This programmatic **cannot** be used for construction of a highway in a new location.

3. **Minor Involvement with Historic Sites** – Applies when the project improves the operational characteristics, safety, and/or physical condition of the highway on the existing alignment. The historic site must be located adjacent to the existing highway to qualify for the programmatic. Such projects include:

- “4 R” work (resurfacing, restoration, rehabilitation and reconstruction).
- Safety improvements (shoulder widening and correction of substandard curves or intersections).
- Traffic operation improvements (signalization, channelization, turning and climbing lanes).
- Bicycle and pedestrian facilities as part of a larger project.
- Bridge replacements on the same alignment.
- Construction of additional lanes.

This programmatic **cannot** be used:

- For a project including removal or alteration of historic buildings, structures, or objects on the historic site.
- For a project requiring an EIS, unless the Section 4(f) impact is discovered after approval of the EIS.
- For a project that requires disturbance or removal of archaeological resources that are important to preserve in place. The State Historic Preservation Officer (SHPO) and/or the Advisory Council on Historic Preservation (ACHP) must concur in the determination.

- The impacts on the historic attributes of the property must be minor. Minor is narrowly defined as “no effect” or “no adverse effect” under Section 106 of the National Historic Preservation Act and [36 CFR 800](#). The ACHP must not object to the “no effect” determination.

The SHPO must agree, in writing, with the impact assessment and the proposed mitigation.

4. **Minor Involvement with Parks, Recreation Areas, and Waterfowl and Wildlife Refuges** – Applies when the project improves the operational characteristics, safety, and/or physical condition of the highway on the existing alignment. The public park, recreation lands, or wildlife and waterfowl refuge must be located adjacent to the state highway. Such projects include:
- “4 R” work (resurfacing, restoration, rehabilitation and reconstruction).
 - Safety improvements (shoulder widening and correction of substandard curves or intersections).
 - Traffic operation improvements (signalization, channelization, turning and climbing lanes).
 - Bicycle and pedestrian facilities as part of a larger project.
 - Bridge replacements on the same alignment.
 - Construction of additional lanes.

The total amount of land to be acquired from any site shall not exceed:

Total Size of Section 4(f) Site	Maximum to be Acquired
< 10 acres	10 percent of site
10–100 acres	1 acre
>100 acres	1 percent of site

This programmatic **cannot** be used:

- For construction of a highway in a new location.
- For a project that requires an EIS.
- For projects that impair the intended use of the remaining Section 4(f) land. The determination includes proximity impacts and is made by FHWA in concurrence with the officials with jurisdiction over the Section 4(f) property.

Impairment shall be documented. Show the size, use, and nature of the impairment.

Document noise, air and water pollution, wildlife and habitat effect, aesthetic values, and other impacts deemed relevant.

Coordinate with the appropriate Federal Agency if the Section 4(f) property is encumbered by a Federal Interest. Ascertain the agency’s position on the land conversion or transfer. The programmatic does not apply if the agency objects. Federal Interest includes:

- Purchase or improvement with federal funds through the Land and Water Conservation Funds Act, Federal Aid in Fish Restoration Act (Dingle-Johnson Act), the Federal Aid in Wildlife Act (Pittman-Robertson Act).
- Former designation as federal surplus property.

The officials with jurisdiction over the Section 4(f) lands must agree, in writing, with the impact assessment and the proposed mitigation.

5. **Transportation Projects That Have a Net Benefit to a Section 4(f) Property** – Applies to federally assisted transportation improvement projects on existing or new alignments. The Administration and officials with jurisdiction will make the determination.

447.04 Cultural Resources May Be Protected Under Section 4(f)

A property containing significant cultural resources is considered a Section 4(f) property. Section 106 of the National Historic Preservation Act defines the process for determining the significance of a cultural resource. Therefore, completion of a Section 106 evaluation is an integral part of the Section 4(f) evaluation. Both laws mandate consideration of cultural resources, but here are some key differences you should be aware of:

- Section 4(f) requires a special effort be made to avoid the use of cultural resources by documenting that all possible planning was used to minimize harm. Section 106 requires consideration of the project effects on cultural resources.
- Section 4(f) applies only to agencies of the DOT. Section 106 applies to any federal agency.
- Section 4(f) applies to actual use or occupancy of the site. Section 106 involves assessment of adverse effect on the property. A direct correlation cannot be made between “use” and “effect.”
- The Section 106 process is integral to the Section 4(f) process when cultural resources are involved. The Section 4(f) process is not integral to the Section 106 process.
- The Section 4(f) process applies a more stringent analysis with respect to totally avoiding cultural resources than the Section 106 process.
- Archeological resources not considered important for preservation in place are not eligible for protection under Section 4(f).

447.05 Railroads and Rail Transit Lines

Section 11502 of the FAST Act (23 U.S.C. 138(f)/49 U.S.C. 303(h)) exempts rail road and rail transit lines that are in use or that were historically used for transportation of goods or passengers from Section 4(f) review. The exemption applies regardless of whether the railroad or rail transit line is listed on or is eligible for listing on the National Register of Historic Places. However, the exemption does not apply to:

- Rail stations or transit stations.
- Bridges or tunnels located on a rail line that has been abandoned, lines that have been rail banked, and lines that have been reserved for future transportation of goods or passengers.

447.06 Section 6(f) Conversion May Be Required

Section 4(f) properties purchased or improved with money from the Land and Water Conservation Fund (LWCF) require additional work. Coordination with the appropriate federal agency will be required. Section 6(f) of the LWCF Act prohibits the conversion of such properties to non-recreation uses without approval by the National Park Service (NPS) or their state designee. Therefore, a Section 6(f) analysis is an integral part of the Section 4(f) evaluation if the project must use land purchased or improved from the LWCF.

While Section 6(f) and Section 4(f) often apply to the same resources they are parts of different laws and there are some key differences:

- Section 4(f) applies only to programs and policies undertaken by the DOT. Section 6(f) applies to programs and policies of any federal agency.
- Section 4(f) allows more flexible mitigation opportunities. Section 6(f) requires that impacted resources be replaced with lands of equal value, location and usefulness.
- Section 6(f) can apply on fully state funded projects where no federal nexus exists.

More detailed guidance for Section 6(f) conversions may be found in [Chapter 455](#).

447.07 Section 4(f) Requirements May Differ for Other Federal Agencies

Section 4(f) is a federal requirement and must be considered in any NEPA document involving any USDOT agency (FHWA, FTA, FRA, and FAA).

447.08 Procedures for Completing a Section 4(f) Analysis

The [Section 4\(f\) Evaluation procedure](#) can be found on the [WSDOT Section 4\(f\) Guidance](#) webpage include:

- A process decision flowchart
- Evaluation requirements
- Discipline Report Checklist
- TSK 457-A: Describing a Section 4(f) Property
- Forms for documents Temporary Occupancy and De minimis Use for CE level projects
- Required wording for Final Section 4(f) Analysis
- PRO 457-a: Recommended Procedure for Conducting a Section 49(f) Evaluation
- Document distribution requirements
- An example graphic

447.09 Section 4(f) and Related Statutes

- Section 4(f) of the Department of Transportation Act 1966
- Section 106 of the National Historic Preservation Act 1966
- Section 6(f) of the Land and Water Conservation Fund Act 1965

447.10 Abbreviations and Acronyms

FAST Act	Fixing America’s Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FRA	Federal Railroad Administration
FAA	Federal Aviation Administration
NRHP	National Register of Historic Places
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users
USDOT	United States Department of Transportation
SHPO	State Historic Preservation Officer
THPO	Tribal Historic Preservation Officer

447.11 Glossary

All Possible Planning – All reasonable measures identified in the Section 4(f) evaluation to minimize harm or mitigate for adverse impacts and effects.

Constructive Use – A constructive use occurs when the transportation project does not incorporate land from a Section 4(f) property, but the project’s proximity impacts are so severe that the protected activities, features, or attributes that qualify a property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the property are substantially diminished.

De minimis Impact – For historic sites, de minimis impact means that the appropriate administering agency has determined, in accordance with [36 CFR 800](#), that no historic property is affected by the project or that the project will have “no adverse effect” on the historic property in question. For parks, recreation areas, and wildlife and waterfowl refuges, a de minimis impact is one that will not adversely affect the features, attributes or activities qualifying the property for protection under Section 4(f).

Feasible and Prudent Avoidance Alternative – A feasible and prudent avoidance alternative avoids using Section 4(f) property and does not cause other severe problems of a magnitude that substantially outweighs the importance of protecting the Section 4(f) property.

Historic Site (Section 4(f)) – Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places. The term includes properties of traditional religious and cultural importance to an Indian Tribe or Native Hawaiian organization that are included in, or are eligible for inclusion in, the National Register.

Officials With Jurisdiction – As defined in [23 CFR 774.17](#), officials of the agency that owns or administers the property in question. For historic sites, the SHPO or THPO may serve as the official with jurisdiction.

Programmatic Section 4(f) Evaluations – Can be used in place of individual evaluations for highway projects where uses are considered minor. To date there are five programmatic evaluations that have been approved for use nationwide. See [Section 447.03](#) of this chapter for criteria.

Section 4(f) Property – A publicly owned park, recreation area, or wildlife and water fowl refuge of national, state, or local significance. Also includes historic sites of national, state or local significance.

Use – “Use” of a Section 4(f) property occurs:

- When land is permanently incorporated into a transportation facility.
- When a temporary occupancy of land has an adverse impact on the resource that the park, recreation area, refuge or historic site was created to protect.
- When there is a constructive use of the property.