

4. Coastal Resources

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Coastal resources include all natural resources occurring within coastal waters and their adjacent shorelands. Coastal resources include islands, transitional and intertidal areas, salt marshes, wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as fish and wildlife and their respective habitats within these areas. Coastal resources include the coastlines of the Atlantic and Pacific oceans, the Great Lakes, and the Gulf of Mexico.

4.1. Regulatory Setting

Exhibit 4-1 lists the primary statutes, regulations, and Executive Orders that may be relevant to the proposed project. See Appendix B.3 for more detailed information about these requirements.

Exhibit 4-1. Statutes, Regulations, and Executive Orders Related to the Protection of Coastal Resources

Statute or Executive Order	Location in U.S. Code or <i>Federal Register</i>	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
Coastal Barrier Resources Act	16 U.S.C. § 3501 et seq.	U.S. Department of the Interior Coastal Barrier Act Advisory Guidelines, 57 <i>Federal Register</i> 52730, (November 5, 1992)	USFWS; FEMA	Prohibits, with some exceptions, Federal financial assistance for development within the Coastal Barrier Resources System that contains undeveloped coastal barriers along the Atlantic and Gulf coasts and Great Lakes.
Coastal Zone Management Act	16 U.S.C. §§ 1451-1466	15 CFR part 930, subparts C and D 15 CFR part 923	NOAA; Appropriate State Agency	Provides for management of the nation's coastal resources, including the Great Lakes.

Statute or Executive Order	Location in U.S. Code or <i>Federal Register</i>	Implementing Regulation(s)	Oversight Agency ^a	Summary ^a
National Marine Sanctuaries Act	16 U.S.C. § 1431 et seq.	15 CFR part 922, subparts F through R	NOAA	Protects areas of the marine environment with special national significance, and requires Federal agencies whose actions could impact sanctuary resources to consult with the program before taking action.
Executive Order 13089, Coral Reef Protection	63 <i>Federal Register</i> 32701, (June 16, 1998)	Not applicable	NOAA	Requires Federal agencies to identify any actions that might affect coral reef ecosystems, protect and enhance the conditions of these ecosystems, and ensure that, to the extent permitted by law, the actions carried out, authorized, or funded by Federal agencies will not negatively impact or degrade coral reef ecosystems.
Executive Order 13547, Stewardship of the Ocean, Our Coasts, and the Great Lakes	75 <i>Federal Register</i> 43021-43027, (July 22, 2010)	Not applicable	Not applicable	Establishes the National Ocean Council, and development of a National Ocean Policy Implementation Plan to promote the well-being, prosperity, and security of ocean, coastal, and Great Lakes ecosystems.

^a U.S.C. = United States Code; CFR= Code of Federal Regulations; FEMA = Federal Emergency Management Agency; USFWS = U.S. Fish and Wildlife Service; NOAA = National Oceanic and Atmospheric Administration

4.1.1. Consultations, Permits, and Other Approvals

This section provides detailed information about consultation required for the Coastal Zone Management Act (CZMA) and the Coastal Barrier Resources Act (CBRA).

4.1.1.1. Coastal Zone Management Act

As noted in Exhibit 4-1 above, the CZMA provides for the management of U.S. coastal resources. If the proposed action or its alternative(s) has the potential for impacts within a coastal zone, the FAA (or an applicant, as appropriate) must initiate consultation with the relevant state agency to ensure that the proposed action and alternative(s) are consistent with the state's coastal management program.

There are two different consistency consultation processes under the CZMA, which are based on whether the proposed project is a Federal agency activity (see 15 CFR §§ 930.30-930.46) or involves an applicant seeking a permit, license, or other authorization from a Federal agency (see 15 CFR §§ 930.50-930.66). There may also be situations in which a proposed project may require compliance with both the Federal agency consistency consultation process and the applicant consistency consultation process. For example, if an applicant proposes to build a

runway requiring FAA approval, which would also require FAA installation of navigational aids, both the FAA and the applicant would need to complete the consistency consultation process.

Note that consistency consultation under the CZMA is only applicable in states with an approved coastal zone management plan. Under this program, state governments design unique coastal zone management programs which are subsequently approved by NOAA. Fulfilling the FAA's obligations under the CZMA may require conducting consultation with the affected state's coastal management program office.

Currently, thirty-four out of thirty-five eligible coastal states, U.S. territories, and commonwealths have approved coastal zone management plans. See <http://coastalmanagement.noaa.gov/mystate/welcome.html> for a list of those states and U.S. territories with approved coastal zone management plans. As of July 1, 2011, Alaska no longer participates in the National Coastal Zone Management Program.

The two consistency consultation processes are described below. Some common definitions used in the consistency consultation process are provided in the text box below.

Note that full consistency with the coastal zone management program may be prohibited by existing laws and legal authorities (such as aviation laws and safety standards). In this case, the FAA may proceed with the action, regardless of a state agency's objection. The FAA must provide the state agency with a written statement citing the statutory provision or legal authority limiting the FAA's discretion to comply with the coastal zone management program. The EA or EIS should state that the FAA provided to the state agency a written statement citing the statutory provisions or other legal authority that limited FAA's discretion to comply with the coastal management program.

Consistency Consultation Process for FAA Activities

The FAA must ensure that all development activities and other direct FAA actions meet the consistency requirements of the state's coastal management program to the extent practicable. The consistency consultation process for FAA actions is described in Exhibits 4-2 and 4-3 below.

A negative determination is the FAA's written determination that an FAA action will have no reasonably foreseeable effect on any coastal use or resource.

A consistency determination is the FAA's written determination regarding how the FAA action would be consistent with the state's coastal zone management plan.

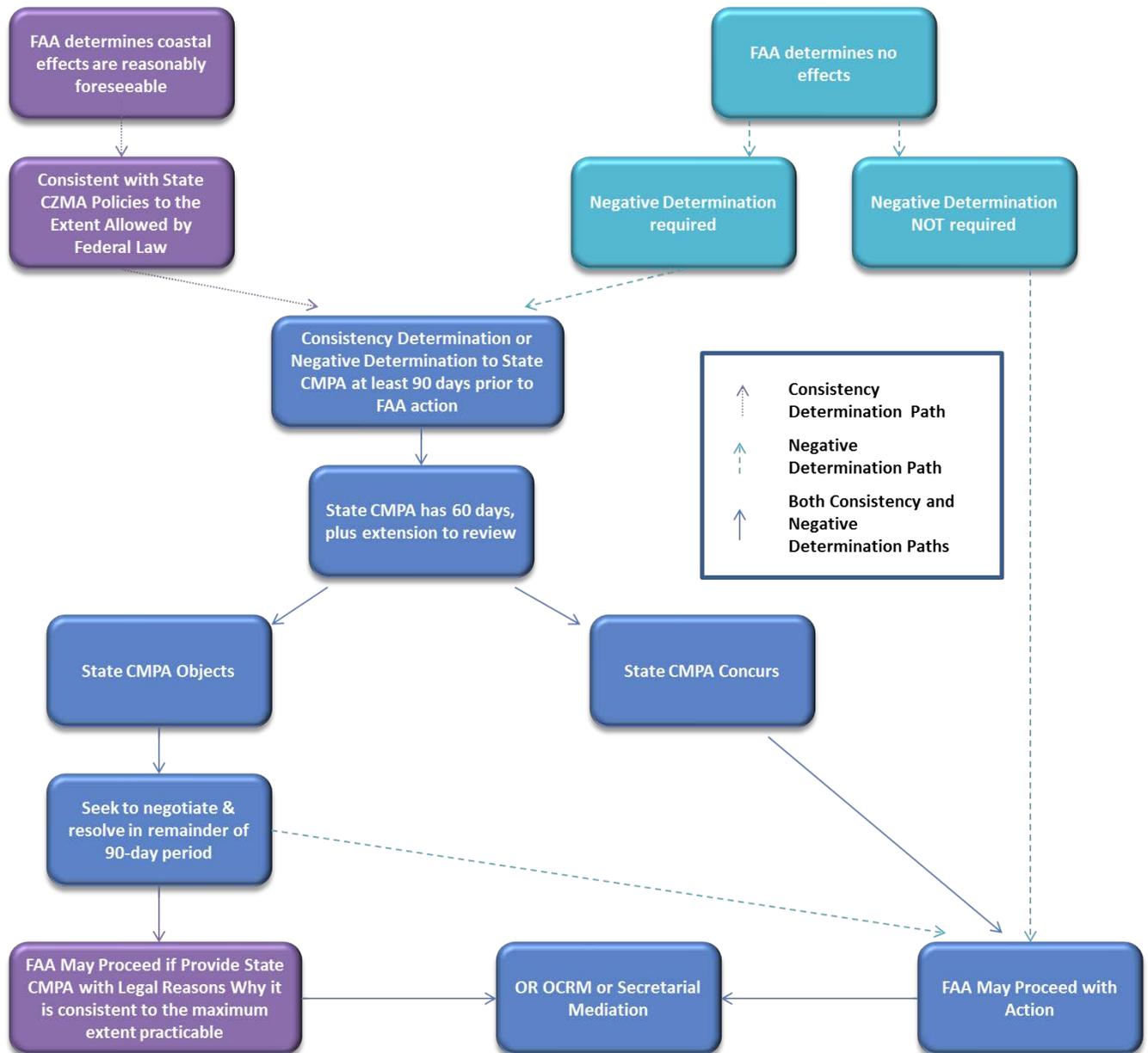
A consistency certification is an applicant-prepared statement that specifies how the proposed activity complies with and will be conducted in a manner consistent with the state's coastal zone management program.

Exhibit 4-2. Consistency Consultation Process for FAA Activities

Step	Action
1	<p>The FAA determines whether the proposed action or alternative(s) may result in reasonably foreseeable effects to coastal resources in the study area (see 15 CFR § 930.33). Effects are determined by looking at reasonably foreseeable direct and indirect effects on any coastal use or resource.</p> <ul style="list-style-type: none"> • If the FAA determines that there are <u>no</u> reasonably foreseeable effects to coastal resources or uses, proceed to Step 2 below (see light blue negative determination path in Exhibit 4-3). • If the FAA determines that there are <u>are</u> reasonably foreseeable effects to coastal resources or uses, proceed to Step 4 below (see purple consistency determination path in Exhibit 4-3).
2	<p>The FAA determines whether preparation of a negative determination is required. A negative determination is required when:</p> <ol style="list-style-type: none"> 1. The action was previously identified by the state agency responsible for the coastal management program (the state agency) as an action that would result in reasonably foreseeable coastal effects or uses; 2. The action is similar to other activities that have required a consistency determination in the past; or 3. The agency has prepared a consistency assessment for the action and has later determined that it would not result in coastal effects (see 15 CFR § 930.35(a)). <ul style="list-style-type: none"> • If a negative determination is <u>not</u> required, the FAA has no further obligations under the CZMA, and no further analysis is needed in the NEPA document. • If a negative determination <u>is</u> required, see Step 3 below.
3	<p>The FAA prepares a negative determination, and submits this negative determination to the state agency at least 90 days prior to implementation of the action.</p> <ul style="list-style-type: none"> • The state agency has at least 60 days to respond to the FAA's negative determination. <ul style="list-style-type: none"> ○ If the state agency <u>concur</u>s with the negative determination, the FAA has no further obligations under the CZMA, and no further analysis is needed in the NEPA document. Any consultation documentation between the FAA and the state agency, including the FAA's negative determination and the state's concurrence letter, should be included in the FAA's NEPA documentation (e.g., as an appendix). ○ If the agency does not respond to the FAA's negative determination within 60 days, the FAA may presume concurrence with the negative determination. ○ If the state agency does <u>not</u> concur with the negative determination, a consistency determination may be submitted, or the FAA and the state agency may try to resolve their differences during the remainder of the 90-day period (see Step 5 below).
4	<p>The FAA prepares a consistency determination (see 15 CFR § 930.41) and submits it to the state agency at least 90 days prior to implementation of the action.</p> <ul style="list-style-type: none"> • The state agency has at least 60 days to respond to the FAA's consistency determination. <ul style="list-style-type: none"> ○ If the state agency <u>concur</u>s with the consistency determination, the FAA has no further obligations under the CZMA, and no further analysis is needed in the NEPA document. Any consultation documentation between the FAA and the state agency, including the FAA's consistency determination and the state's concurrence letter, should be included in the FAA's NEPA document (e.g., as an appendix). ○ If the state agency does not respond to the FAA's consistency determination within 60 days, the FAA may presume concurrence with the consistency determination. ○ If the state agency does <u>not</u> concur with the consistency determination, the FAA and the state agency may try to resolve their differences during the remainder of the 90-day period (see Step 5 below).

Step	Action
5	As stated in Steps 3 and 4 above, if the state agency objects to the FAA's negative determination or consistency determination, the FAA and the state agency may try to resolve their differences during the remainder of the 90-day period. If the parties are unable to resolve their differences by the end of the 90-day period, see Step 6 below.
6	<p>If the parties are unable to resolve the objection during the 90-day period:</p> <ul style="list-style-type: none"> • The FAA may proceed over the state agency's objection if: <ul style="list-style-type: none"> o The FAA clearly describes, in writing, how the action is "consistent to the maximum extent practicable" (see definition at 15 CFR § 930.32), and how full consistency is prohibited by existing law applicable to the FAA; or o The FAA has concluded that the proposed action and alternative(s) are fully consistent with the enforceable policies of the state agency, though the state agency objects. <p>In these cases, the FAA must notify the state of its decision to proceed before implementation of the action begins (see 15 CFR § 930.43(b)-(e)); or</p> <ul style="list-style-type: none"> • The FAA may delay until issues are resolved using the dispute resolution mechanism in 15 CFR §§ 930.110- 930.116.

Exhibit 4-3. FAA Coastal Consistency Flow Chart^a



^a CMPA = Coastal Management Program Agency; OCRM = NOAA’s Office of Ocean and Coastal Resource Management

Consistency Consultation Process for Applicants Seeking an FAA License, Permit, or Other Authorization

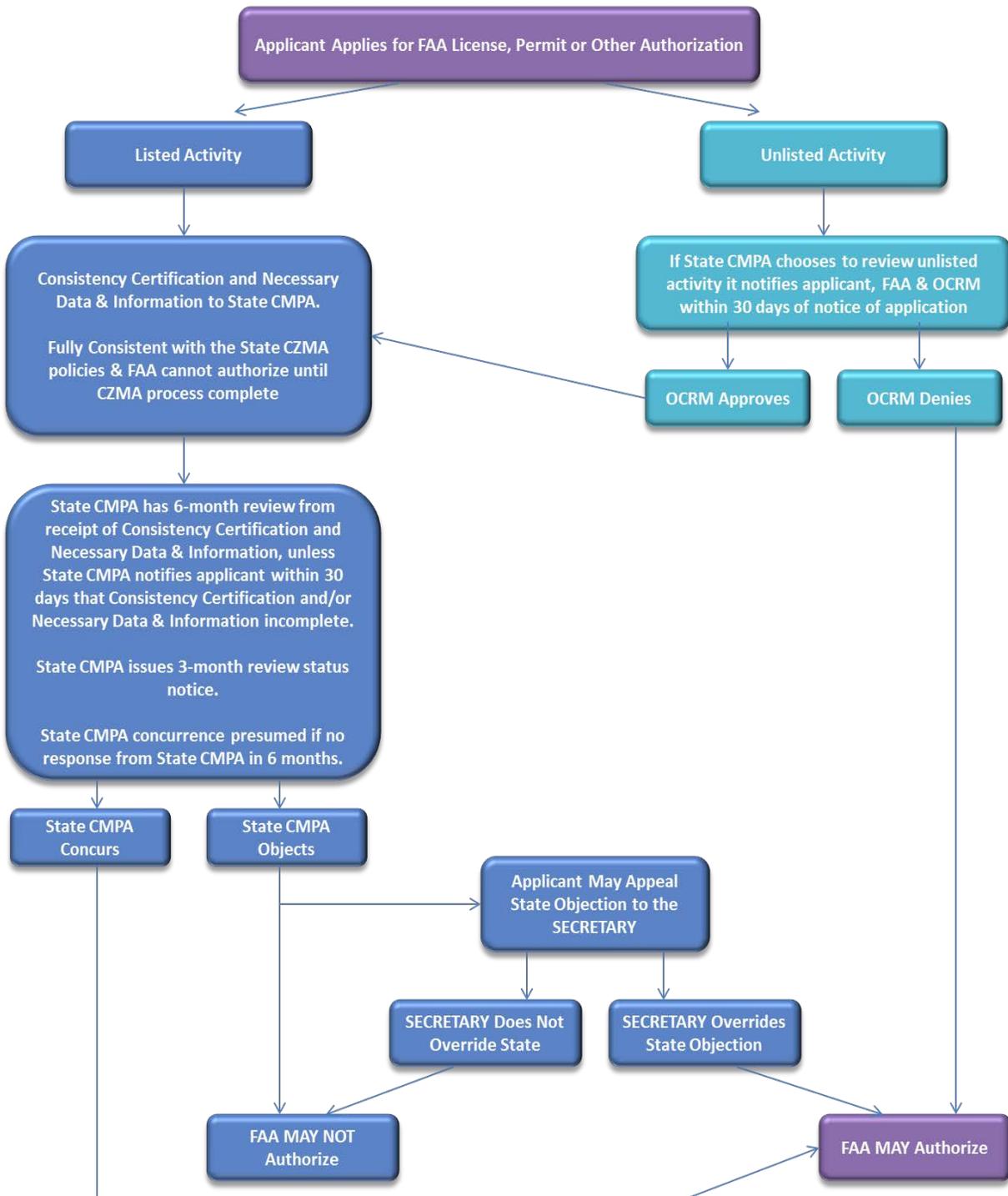
The FAA may not issue a license, permit, or authorization to an applicant unless an applicant's proposed action meets the consistency requirements of the state's coastal management program. A license or permit means any authorization that an applicant is required by law to obtain in order to conduct activities affecting any land or water use or natural resource of the coastal zone and that any Federal agency is empowered to issue to an applicant. The consistency consultation process for applicants seeking an FAA license, permit, or authorization is described in Exhibits 4-4 and 4-5 below.

Exhibit 4-4. Consistency Consultation Process for Applicant Seeking an FAA License, Permit, or Other Authorization

Step	Action
1	<p>The applicant determines if the FAA license, permit, or other authorization being applied for is listed as an activity in the state agency's coastal management plan.</p> <ul style="list-style-type: none"> • If the activity is not listed, proceed to Steps 2 and 3 below (see light blue unlisted activity path in Exhibit 4-5). • If the activity is listed, proceed to Step 4 below (see dark blue listed activity path in Exhibit 4-5).
2	<p>The applicant or the FAA provides written notice of the submission of an application for an FAA license, permit or authorization for an unlisted activity to the state agency (see 15 CFR § 930.54(a)(2) for more information). The state agency decides if it wants to review the activity for consistency.</p> <ul style="list-style-type: none"> • If the state agency chooses not to review the unlisted activity, the FAA may issue the license, permit, or other authorization (note that the agency waives its consistency rights if it does not respond in 30 days). The FAA should include any correspondence between the applicant and the state agency in the FAA's NEPA document (e.g., as an appendix). • If the state agency chooses to review the unlisted activity, the state agency will notify the applicant, the FAA, and NOAA's Office of Ocean and Coastal Resource Management (OCRM) within 30-days (see Step 3 below).
3	<p>If the state agency chooses to review the unlisted activity, OCRM must approve the review (see 15 CFR § 930.54(b)).</p> <ul style="list-style-type: none"> • If OCRM denies the review, the FAA may issue the license, permit, or other authorization. The FAA should include any correspondence between the applicant, the state agency, and OCRM in the FAA's NEPA document (e.g., as an appendix). • If OCRM approves the review, the applicant must follow the steps for a listed activity. Proceed to Step 5 below (see dark blue listed activity path in Exhibit 4-5).
4	<p>If the license, permit, or authorization is a listed activity under the state's coastal management plan, the applicant determines whether the action would take place in the coastal zone or outside the coastal zone.</p> <ul style="list-style-type: none"> • If the action would take place outside the coastal zone, the applicant determines if the action would take place in a designated geographic location listed in that state's coastal management program agency (see 15 CFR § 930.53(a)(1)). <ul style="list-style-type: none"> ○ If the applicant determines that the action would take place outside of the coastal zone and in a geographic location not listed in the state's coastal management program, the applicant must follow the steps for an unlisted activity (see Steps 2 and 3 and light blue unlisted activity path in Exhibit 4-5). • If the action would take place inside the coastal zone or outside the coastal zone and in a designated geographic location listed in that state's coastal management program, proceed to Step 5 below.

Step	Action
5	<p>The applicant prepares a consistency certification and necessary data and information and submits it to the state agency (see 15 CFR §§ 930.57-930.58 for more information).</p> <ul style="list-style-type: none"> • The state agency has 6 months to review the consistency certification, data, and information (15 CFR § 930.62). <ul style="list-style-type: none"> ○ The applicant must be notified by the state agency within 30 days if insufficient information was submitted (15 CFR § 930.60). ○ The state agency will issue the applicant a 3 month review status notice (15 CFR § 930.62).
6	<p>After 6 months:</p> <ul style="list-style-type: none"> • If the state agency concurs, the FAA may issue the license, permit, or other authorization (note that if no response is received from the state agency after 6 months, state concurrence with the certification is presumed). The FAA should include any documentation between the applicant and the state agency, including the consistency certification and the state agency's concurrence letter, in the FAA's NEPA document (e.g., as an appendix). • If the state agency objects, the FAA may not issue the license, permit, or other authorization (see Step 7 below).
7	<p>If the state agency objects to the consistency certification, the applicant may appeal the objection to the Secretary of Commerce who may override the state agency objection (see 15 CFR part 930 subpart H).</p> <ul style="list-style-type: none"> • If the Secretary overrides the state agency objection, the FAA may issue the license, permit, or other authorization. The FAA should include any documentation between the applicant, the state agency, and the Secretary in the FAA's NEPA document (e.g., as an appendix). • If the Secretary does not override the state objection, the FAA may not issue the license, permit, or other authorization.

Exhibit 4-5. Coastal Consistency Flow Chart for Applicant Seeking FAA License, Permit, or Other Authorization



4.1.1.2. Coastal Barrier Resources Act

If an FAA proposed action or its alternative(s) would occur on land within the Coastal Barrier Resources System (CBRS) and involve FAA funding for development, the FAA must initiate consultation with the USFWS or FEMA to solicit comments on the proposed action and alternative(s). The USFWS must have the opportunity to comment on the proposed action before the FAA may make a decision to implement the proposed action. The USFWS will determine if the proposed action is consistent with the CBRA. Any consultation documentation that results from coordination under the CBRA should be included in the FAA's NEPA document (e.g., an appendix). Project-related impacts on coastal resource biotic resources and water quality may be described in the NEPA document's CBRA section or in the sections of the NEPA document addressing these biotic and water quality issues. Executive Order 13089, *Coral Reef Protection*

Under this Executive Order, U.S. coral reef ecosystems are defined to mean those species, habitats, and other natural resources associated with coral reefs in all maritime areas and zones subject to the jurisdiction or control of the United States. When a proposed FAA action may affect U.S. coral reef ecosystems, the FAA should, subject to the availability of appropriations, provide for implementation of measures needed to research, monitor, manage, and restore affected ecosystems, including, but not limited to, measures reducing impacts from pollution, sedimentation, and fishing. To the extent consistent with statutory responsibilities and procedures, these measures should be developed in cooperation with the U.S. Coral Reef Task Force and fishery management councils and in consultation with affected states, territorial, commonwealth, and local government agencies, tribes, nongovernmental organizations, the scientific community, and commercial interests as part of the U.S. Coral Reef Initiative. Refer to the National Action Plan for Coral Reef Conservation at: <http://www.coralreef.gov/about/CRTFAxnPlan9.pdf> and NOAA's Coral Reef Information System (CoRIS) at: <http://coris.noaa.gov/> for further information regarding impacts to coral reefs and marine protected areas.

4.2. Affected Environment

When defining the study area for coastal resources, be sure to consider indirect impacts that may result from construction or operations activities such as light emissions, noise, air emissions, or changes to water quality or quantity.

The following sources may be useful in gathering information regarding coastal resources:

- NOAA's list of State Coastal Zone Boundaries at: <http://coastalmanagement.noaa.gov/mystate/docs/StateCZBoundaries.pdf> to determine the boundaries of the coastal zone in the study area;
- NOAA's OCRM Office website at: <http://coast.noaa.gov/> for additional information regarding state coastal management programs and data;
- NOAA's Digital Coast application at: <http://coast.noaa.gov/digitalcoast/> provides multiple coastal resource data sets that can be used to address coastal resource issues;
- USFWS CBRS unit maps at: <http://www.fws.gov/CBRA/Maps/index.html> identify designated areas of the CBRS; and

- ReefGIS online maps at: http://www.reefbase.org/gis_maps/default.aspx provide an interactive map that displays coral reef location data and information worldwide.

4.3. Environmental Consequences

Impacts to coastal resources may result from construction within the coastal zone that leads to a loss of a natural flood control area, resulting in increased flooding in the study area. Alternately, creation of a new impermeable surface, such as a runway (even if outside of the designated CZMA coastal zone), could lead to increased run-off which could affect water quality in nearby coastal waters. In addition, an increase in facility lighting due to a proposed project could affect wildlife such as sea turtles nesting on nearby shorelines.

4.3.1. Significance Determination

The FAA has not established a significance threshold for coastal resources in FAA Order 1050.1F; however, the FAA has identified factors to consider when evaluating the context and intensity of potential environmental impacts on coastal resources (see Exhibit 4-1 of FAA Order 1050.1F). Please note that these factors are not intended to be thresholds. If these factors exist, there is not necessarily a significant impact; rather, the FAA must evaluate these factors in light of context and intensity to determine if there are significant impacts. Factors to consider that may be applicable to coastal resources include, but are not limited to, situations in which the proposed action or alternative(s) would have the potential to:

- Be inconsistent with the relevant state coastal zone management plan(s);
- Impact a coastal barrier resources system unit (and the degree to which the resource would be impacted);
- Pose an impact to coral reef ecosystems (and the degree to which the ecosystem would be affected);
- Cause an unacceptable risk to human safety or property; or
- Cause adverse impacts to the coastal environment that cannot be satisfactorily mitigated.

4.4. Mitigation

Some examples of potential measures to mitigate impacts to coastal resources include:

- Moving the proposed project outside of the coastal zone;
- Tailoring a project to promote consistency with Federally-approved coastal zone management plans; and
- Incorporating any site-specific recommendations proposed by relevant Federal or state agencies having jurisdiction over the coastal resource as a result of any consultation.