

Topic	Major Key Findings	<u>Need for Change Statement</u>	<u>Proposed Management Strategy</u>	Is this finding new information for us?	Was this finding addressed in the 1997 Forest Plan direction?	Has there been a change in law, policy or regulation? What new laws, Executive Orders, Departmental Policy, or Federal Regulation apply to the new finding.	Is this finding relevant to current conditions and/or trends?	Will this finding be used to develop the DFC, Objectives, and management area, guidelines or Standards of the new Forest Plan?	Is there a need to develop a specific monitoring question to address this finding?	<u>Need for Change Statement</u>	<u>Proposed Management</u>
<b>Wetland</b>	The land above 600 meters of elevation contains the soil, vegetation and hydrological elements of a functional wetland. The area covers 13,335 acres, which represent 47% of the land base.	This is a forest condition not dealt with in the LMP of 1997. New key ecosystem characteristic that presents the condition, composition, structure, function, and the connectivity of the area.	Develop plan components that protect the current condition. Submit to the National Wetland Inventory.	Yes	No	Yes New Planning Rule	Yes	Yes	Yes	This is a forest condition not dealt with in the LMP of 1997. New key ecosystem characteristic that presents the condition, composition, structure, function, and the connectivity of the area.	
<b>Vegetation</b>	Vegetation classification using the National Vegetation Classification (NVC) System developed by the Federal Geographic Data Committee (FGDC); describes 15 ecosystems at EYNF.	There is a need to change the ecosystem composition classification for the EYNF that can explain and describe the last several decades of information gathered by researchers and managers. <b>The way the 1997 forest plan was laid out for the multiple resources of the forest needs to change because of the four forest types that used to be classified. Now, we have more level of detailed in terms of the vegetation structure and composition of the forest and this will potentially change the use of the land.</b>	Develop plan components considering the new classification.	Yes	No	Yes New Planning Rule	Yes	Yes	Yes	There is a need to change the ecosystem composition classification for the EYNF that can explain and describe the last several decades of information gathered by researchers and managers. <b>The way the 1997 forest plan was laid out for the multiple resources of the forest needs to change because of the four forest types that used to be classified. Now, we have more level of detailed in terms of the vegetation structure and composition of the forest and this will potentially change the use of the land.</b>	
<b>Soil</b>	New soils maps identify a prevalence of hydric soils throughout the Forest. They cover 11,914 acres, which is 42% of the total forest	Need to address hydric soils, in particular, above the 600m elevation line. Item to consider in the EIS and maybe bring to the	Develop plan components that protect the current condition. Submit to the	Yes	no, no data available at the time	Yes New Planning Rule	Yes	Yes	Yes	Need to address hydric soils, in particular, above the 600m elevation line. Item to consider in the EIS and maybe bring to the National Soil Inventory.	

	area.	National Soil Inventory.	National Wetland Inventory. Develop plan components that address resource sustainability.								
<b>Flora</b>	There are an estimated total of 636 native and endemic flora species in the EYNF, for which their conservation status was evaluated. Application of the At-Risk Species criteria resulted in: Eight of these plant species are federally listed as endangered or threatened with extinction by the USFWS. Fourteen plans categorized as Species of Conservation Concern. However, there are twenty-nine species for which the plant conservation remains a concern.	The new Planning Rule calls for a new procedure (determination of at-risk species) and the use of analysis tools to determine the Potential Species Conservation Concern.	Change from Management Indicator Species to an At-Risk Management Model.	Partially	Sí, porque anteriormente se consideró parcialmente a través de las especies indicadoras de manejo. List of Proposed, Endangered, Threatened and Sensitive Species for the Carribbean National Forest. (Partially)	Yes, New Planning Rule	Yes	Yes	Yes	The new Planning Rule calls for a new procedure (determination of at-risk species) and the use of analysis tools to determine the Potential Species Conservation Concern.	
<b>Wildlife</b>	There are an estimated total of 166 fauna species found in the EYNF, which include: 32 species of snails and crustaceans (invertebrate species), 134 vertebrates species and about 11 orders of insects that include multiple families. Application of the At-Risk Species criteria resulted in: Five federally listed as endangered or threatened with extinction by the US	Since the 1997 El Yunque National Forest, new better defined ecosystem drivers for Forest Service policy such as climate change and non-native invasive species has brought the need to address management concerns towards the viability of these "At risk" fauna species.	Change from Management Indicator Species to an At-Risk Management Model. Develop a Management Situation for the Elfin Woods Warbler. Eliminate the Puerto Rican Parrot Management Situation.	Yes	Partially, new potential species of concern (scc) has been established through new scc criteria. Some old Regional Forester's sensitive species did make the new scc list.	2012 planning regulations, which is the agency's new interpretation of the National Forest Management Act	Yes	Yes	Yes	Since the 1997 El Yunque National Forest, new better defined ecosystem drivers for Forest Service policy such as climate change and non-native invasive species has brought the need to address management concerns towards the viability of these "At risk" fauna species.	

	Fish & Wildlife Service (USFWS): Puerto Rican Parrot, Puerto Rican Broad-winged and Sharp-shinned hawks, Puerto Rican Boa, and Elfin-woods warbler. One (1) listed species, the White-necked Crow, no longer exists in Puerto Rico. Twenty two fauna Species of Conservation Concern: nine (9) species of coquies, two (2) species of anole lizards, one (1) bat species, three (3) bird species, five (5) species of fishes and two (2) species of freshwater shrimp.									
<b>Drivers and Stressors (Climate Change)</b>	Climate change can significantly impact the management and sustainability of the EYNF and the surrounding communities, including the biological diversity, aquatic and terrestrial ecosystems, and recreational and economic opportunities.	Changing climate variability is expected to continue to lead to higher temperatures, more intense rainfall events and longer periods of drought in the future. Collaboration on monitoring temperature and precipitation changes, which will determine any departure from projections used in the plan assessment. <b>This will also impact the sustainability of the forest and the broader scale of the forest in a more general sense.</b>	Stella	Yes	not addressed	Yes - (36 CFR 219.6(b)(3) and 219.12(5)(vi)) (FSH 1909.12 Chapter 10 - 12.3)	Yes	Yes, but may best be integrated with other plan direction related to sustainability.	yes, we need to consider future adaptatives managements actions.	Changing climate variability is expected to continue to lead to higher temperatures, more intense rainfall events and longer periods of drought in the future. Collaboration on monitoring temperature and precipitation changes, which will determine any departure from projections used in the plan assessment. <b>This will also impact the sustainability of the forest and the broader scale of the forest in a more general sense.</b>
<b>Drivers and Stressors- (Climate Change)</b>	Extreme weather conditions are expected to be more common.	While change in climate may be gradual and long-term, disturbance from extreme weather events may drive rapid changes that require special monitoring attention the informs adaptive management actions.	Develop integrated plan components that considered extreme weather conditions	Yes	No	Yes - (36 CFR 219.6(b)(3) and 219.12(5)(vi)) (FSH 1909.12 Chapter 10 - 12.3)	Yes	Yes	Yes	While change in climate may be gradual and long-term, disturbance from extreme weather events may drive rapid changes that require special monitoring attention the informs adaptive management actions.

			effects on water resource use, wildlife habitat management, soil and water conservation, safety, recreation, invasive species and ecosystem services.								
<b>Recreation</b>	Visitation to the EYNF continues to increase, creating more pressure on PR-191 Recreation Corridor.	Infrastructure-roads could be affected due to high traffic...Should we consider noise as a topic to monitor in the strategies?	JOSE	No	Yes	Yes	Yes	Yes	Yes	Yes	Infrastructure-roads could be affected due to high traffic...Should we consider noise as a topic to monitor in the strategies?
<b>Recreation</b>	Public access to different parts of the Forest beyond the high visitation corridor has been reduced.	Access to recreation areas need to take into consideration site specific carrying capacity.	JOSE	Yes	Yes	No	Yes	Yes	Yes	Yes	Access to recreation areas need to take into consideration site specific carrying capacity.
<b>Recreation</b>	Although there are new recreation opportunities and demands, such as more visitations per day, the Forest continues to provide the same recreation opportunities since the 1997 Plan.	There is a need to develop Standards and Guidelines related to Forest crowding during high use periods.	JOSE	Yes	No	Yes. There are new agreements with the PR Police regarding the closing of PR-191 during high visitation.	Yes	Yes	Yes	Yes	There is a need to develop Standards and Guidelines related to Forest crowding during high use periods.
<b>Cultural Resources</b>	Although the Forest administration has made good progress in the inspection and nomination of heritage resources, only a small number of potential candidate sites have been nominated and maintenance of cultural assets faces a critical challenge.	Maintenance of cultural assets faces a critical challenge as a consequence of: economic (human resources for maintenance)?	Manage cultural assets in a sustainable manner.	Yes	No	Yes	Yes	Yes	Yes	Yes	Maintenance of cultural assets faces a critical challenge as a consequence of: economic (human resources for maintenance)?

<p><b>Lands</b></p>	<p>Forested areas represent the largest portion of land cover in the region surrounding the EYNF, and forested cover has increased over the past several decades. Nonetheless, urban cover is increasing at a much more rapid pace, resulting in landscape fragmentation and negative impacts on the Forest and other natural areas in the Region.</p>	<p>Strategies directed to control urbanization surrounding EYNF (Negatives effects of urbanization related to climate change (7a)).</p>	<p>Update Land acquisition Plan that promotes conservation initiatives on stream corridors &amp; riparian area, Wild &amp; Scenic Rivers corridors within the Proclamation Boundary and GRNE CEN Rivers Reserve. Integrate lands programs to NGOs conservation easements and other land conservation and restoration programs.</p>	<p>Yes</p>	<p>No</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Strategies directed to control urbanization surrounding EYNF (Negatives effects of urbanization related to climate change (7a)).</p>	
<p><b>Lands</b></p>	<p>Land dedicated to farms in the region surrounding the EYNF, is decreasing, while also being increasingly parcelized and fragmented. Agricultural lands represent an opportunity for conservation for growing food, provide for wildlife, and employment through recreation.</p>	<p>There is a need to develop strategies for agricultural activities. This plan should include growing food, employment, etc.</p>	<p>Update Land acquisition Plan that promotes conservation initiatives on stream corridors &amp; riparian area, Wild &amp; Scenic Rivers corridors within the Proclamation Boundary and GRNE CEN Rivers Reserve. Integrate lands programs to</p>	<p>Yes</p>	<p>No</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>Yes</p>	<p>There is a need to develop strategies for agricultural activities. This plan should include growing food, employment, etc.</p>	

			NGOs conservation easements and other land conservation and restoration programs.								
<b>Infrastructure- (Buildings)</b>	There are high numbers of vacant facilities in EYNF.	High numbers of vacant facilities as a consequence of: economic- (human resources for maintenance)?	Provide opportunities for private investment and utilization of abandoned facilities.	Yes	No	Yes	Yes	Yes	Yes	High numbers of vacant facilities as a consequence of: economic- (human resources for maintenance)?	
<b>Infrastructure- (Economic )</b>	There are opportunities for private ventures.	Strategies should be directed to promote local people to open new business	Provide opportunities for private investment and utilization of resources.	Yes	No	Yes	Yes	Yes	Yes	Strategies should be directed to promote local people to open new business	
<b>Lands</b>	EYNF land ownership has remained stable in recent years, though priority acquisition areas remain largely unprotected on private lands.	There is a need to ensure plan direction promotes land base contiguity where possible and effective management of isolated tracts when necessary. Plan direction should promote the maintenance of existing arrangements and the pursuit of new opportunities for land acquisition and conservation across Forest boundaries by working with adjacent and interested public and private land managers, land owners, and other stakeholders within a landscape approach.	Update Land acquisition Plan which promotes conservation initiatives on stream corridors & riparian area, Wild & Scenic Rivers corridors within the Proclamation Boundary and GRNE CEN Rivers Reserve. Integrate lands programs to NGOs conservation easements and other land conservation and restoration	No	Yes	(USDA All Lands Approach; ?? Land Ownership Adjustment Strategy ??)	Yes	Yes	Yes	There is a need to ensure plan direction promotes land base contiguity where possible and effective management of isolated tracts when necessary. Plan direction should promote the maintenance of existing arrangements and the pursuit of new opportunities for land acquisition and conservation across Forest boundaries by working with adjacent and interested public and private land managers, land owners, and other stakeholders within a landscape approach.	

			programs.								
<b>Lands</b>	The EYNF has several designated land uses, which contribute to forest conservation and socio-ecological sustainability. Special designated land uses within the EYNF include federally-designated experimental forest, research natural area, wild and scenic river segments, and wilderness area.	There is a need to update and/or clarify plan direction regarding the management of designated areas, including the Luquillo Experimental Forest, El Toro Wilderness Area, Wild and Scenic Rivers, and others to reflect new designations since 1997 and to enhance the ecological, economic and social sustainability of the Forest.	Update plan direction for LEF in lieu of the latest RWUD. Revise plan direction for El Toro Wilderness. Develop plan direction for El Verde Scenic Route.	No	Yes	(Legislation designating WA and WSR)	Yes	Yes	Yes	There is a need to update and/or clarify plan direction regarding the management of designated areas, including the Luquillo Experimental Forest, El Toro Wilderness Area, Wild and Scenic Rivers, and others to reflect new designations since 1997 and to enhance the ecological, economic and social sustainability of the Forest.	
<b>Lands</b>	The EYNF encompasses over 30 miles of roads and 36 miles of trails, but given its popularity, there is frequent congestion and overcrowding of the Forest during high use times.	There is a need to provide continued maintenance and management to roads and trails in the Forest and for plan direction to promote new approaches for managing and maintaining roads and trails (e.g., transit system; partnerships for road and trail maintenance, management and maintenance prioritization).	Create plan direction that addresses to roads and trails sustainability due to reduced maintenance funds, physical conditions and climate change.	No	Yes	2005 Travel Management Rule	Yes	Yes	Yes	There is a need to provide continued maintenance and management to roads and trails in the Forest and for plan direction to promote new approaches for managing and maintaining roads and trails (e.g., transit system; partnerships for road and trail maintenance, management and maintenance prioritization).	
<b>Lands</b>	Forested areas represent the largest portion of land cover in the region surrounding the EYNF, and forested cover has increased over the past several decades. Nonetheless, urban cover is increasing at a much more rapid pace, resulting in landscape fragmentation and negative impacts on the Forest and other natural	There is a need to provide updated guidance for managing the forest within the context of the larger landscape and for addressing local land use changes and the associated impacts on the Forest, for example, by finding opportunities to develop management strategies that include partnerships, collaborative efforts, and coalitions of support to promote sustainability and	Provide updated guidance for managing the forest within the context of the larger landscape and for addressing local land use changes and the associated impacts on the Forest, for example, by	No	??	(Land Use Plans, Zoning Regulations)	Yes	Yes	Yes	There is a need to provide updated guidance for managing the forest within the context of the larger landscape and for addressing local land use changes and the associated impacts on the Forest, for example, by finding opportunities to develop management strategies that include partnerships, collaborative efforts, and coalitions of support to promote sustainability and to solve existing and future	

	areas in the Region. Additionally, land dedicated to farms in the region, is decreasing, while also being increasingly parcelized and fragmented.	to solve existing and future challenges at the landscape level.	finding opportunities to develop management strategies that include partnerships, collaborative efforts, and coalitions of support to promote sustainability and to solve existing and future challenges at the landscape level.							challenges at the landscape level.	
<b>Social-Economic</b>	Populations surrounding the EYNF are increasingly dense and urbanized, and many of the negative effects of urbanization are likely to be compounded in the context of global climate change.	Climate Change will produce more common extreme weather events. There is a need to develop strategies to control urbanization surrounding EYNF due to the negative effects it can cause in the context of climate change. For example: consequences of extreme weather events-flooding, access limitations, landslides, damages to infrastructure, <b>negative effects to local business?</b> ...To make it possible, collaboration between state agencies is highly needed. Strategies should be also directed to reach this collaboration... it is important, for our plan vision, to consider other state's plans, new regulations, etc???. For example: El Plan de Uso de Terrenos, Plan y Reglamento del Area de Planificación Especial del Carso (recently approved).	Update Land acquisition Plan which promotes conservation initiatives on stream corridors & riparian area, Wild & Scenic Rivers corridors within the Proclamation Boundary and GRNE CEN Rivers Reserve. Integrate lands programs to NGOs conservation easements and other land conservation and restoration programs. <b>Enhanced collaboration</b>	Yes	No	Yes, Open Space Policy, Climate Change Executive Orders, All Lands Policy,	Yes	Yes	Yes. Monitoring Open Space change is needed to assess effects on broad landscape.	Climate Change will produce more common extreme weather events. There is a need to develop strategies to control urbanization surrounding EYNF due to the negative effects it can cause in the context of climate change. For example: consequences of extreme weather events-floodings, access limitations, landslides, damages to infrastructure, <b>negative effects to local business?</b> ...To make it possible, collaboration between state agencies is highly needed. Strategies should be also directed to reach this collaboration... it is important, for our plan vision, to consider other state's plans, new regulations, etc???. For example: El Plan de Uso de Terrenos, Plan y Reglamento del Area de Planificación Especial del Carso (recently approved). Should be <b>Compatibles??</b>	

		Should be <b>Compatible?</b>	with state and local land planning and management agencies within all lands approach.								
<b>Social-Economic</b>	The Regional population is getting older.	While regional population is getting older there is a need to adapt access, services, and recreation opportunities to these population changes. Strategies should be directed to improve existing recreation opportunities and develop new services to aging population in a long-term vision.	Create a recreational opportunity spectrum that considers regional population changes and new visitation patterns. <b>Create a recreational opportunity spectrum that considers regional population changes and new visitation patterns. Use adaptive management as core method for resource output planning. (combined rows 22 and 24)</b>	Yes	<b>No</b>	Yes	<b>Yes</b>	Yes	Yes	While regional population is getting older there is a need to adapt access, services, and recreation opportunities to these population changes. Strategies should be directed to improve existing recreation opportunities and develop new services to aging population in a long-term vision.	
<b>Social-Economic</b>	The Regional population is large, dense, and continues to increase, albeit at a slower pace than in decades past. The population surrounding the Forest is increasingly dense and	There is a need to address growing and changing demands for access, goods, and services from local and other communities, requiring planning and management to be adaptive to ongoing changes.	Use adaptive management as core method for resource output planning.	Yes	??	Yes	Yes	Yes	Yes	There is a need to address growing and changing demands for access, goods, and services from local and other communities, requiring planning and management to be adaptive to ongoing changes.	For example, as development adjacent to and downstream from the Forest continues, demand for surface and subsurface water is expected to increase, which has implications for the

	urbanized and many of the negative effects of urbanization are likely to be compounded in the context of global climate change.										water resources within the Forest, particularly in the context of a changing climate. As such, plan direction should clearly identify capacity for and potential impacts of increased water withdrawals, monitor changes in water supply over time, and incorporate adaptive measures for managing forest water resources.
<b>Social-Economic</b>	Overall, the regional population is aging, but still maintains a significant portion that is young.	There is a need for plan direction to continue to provide a sustainable supply of goods and services to local and other populations, including the need to update, adapt, or target the spectrum of recreation opportunities to better reflect current and projected demands and potential impacts from an aging population.	Use adaptive management as core method for resource output planning.	Yes	No	Yes	Yes	??	Yes	There is a need for plan direction to continue to provide a sustainable supply of goods and services to local and other populations, including the need to update, adapt, or target the spectrum of recreation opportunities to better reflect current and projected demands and potential impacts from an aging population.	
<b>Social-Economic</b>	Per capita and family wealth in the Region have increased, but only modestly outpacing inflation, and unemployment rates are slowly improving. However, poverty remains high among families and, particularly, among children, and populations to the south of the Forest demonstrate the highest rates of poverty and unemployment.	There is a need for plan direction to continue, and find new ways, to provide a sustainable supply of goods and services that lends support to local communities and their economies, while being consistent with achieving desired conditions. Plan direction should be responsive to changes in demands for facilities and services that result from changing demographics of local and other populations, as well as to differences in those demands within the region surrounding the forest.	Use adaptive management as core method for resource output planning.	Yes	??	??	Yes	??	Yes	There is a need for plan direction to continue, and find new ways, to provide a sustainable supply of goods and services that lends support to local communities and their economies, while being consistent with achieving desired conditions. Plan direction should be responsive to changes in demands for facilities and services that result from changing demographics of local and other populations, as well as to differences in those demands within the region surrounding the forest.	

