

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Puerto Rico, Landscape-scale Restoration Initiative to Establish Biological Corridors and Restore Ecosystem Functionality after the Impact of a Major Hurricane in the Caribbean Area.

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Funds Obligated

	FY18	FY19	FY20
NRCS - EQIP Financial & Technical Assistance	Financial Assistance: \$46,523.16 Technical Assistance: \$4,187.10	Financial Assistance: \$305,738.63 Technical Assistance: \$27,516.48	Financial Assistance: \$288,204.00 Technical Assistance: \$25,938.36
NRCS - Additional Funds		Interagency Agreement (USFWS) for Technical Assistance: \$160,422.00	
FS - State and Private Forestry	SPLR \$369,340 SPUF \$43,348 SPST \$35,631 SPFC \$27,190	FNLR \$300,000	SPLR \$760,000**
FS - Non JCLRP Funds	--	--	SPST \$5,897
Other (partner investments)	\$216,750.00*	\$216,750.00*	\$216,750.00*
Total	\$742,969.26	\$1,010,427.11	\$1,296,789.36

*_Approximated in-kind amount

** Pending final obligation- Funds were sent to wrong Region under the name of an unknown employee and were made available late in the grant processing process of FY2020.

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Conservation Outcomes

- *More than 8 partnership has been developed between NRCS, US Forest Service, NGOs, state agencies, and Conservation Districts to implement the Caribbean Joint Chefs Landscape Restoration Partnerships (see Appendix 1 for the entities list participating in this partnerships).*
- *By working closely with partners, this Joint Chiefs' initiative in Puerto Rico identified more than 48 private landowners interested in participating in the program and service provided under the Initiative.*
 - *This resulted in the establishment of 38 NRCS conservation contracts with conservation practices identified to address the resource concerns on each land. This represent more than 2,915 acres to be impacted with restoration actions (see Appendix 2).*
 - *13 Forest Stewardship Management Plan (FSMP) has been developed and 27 more are planned to be elaborated during FY 21, 22 and 23, including the 38 lands under NRCS contracts. In total, 40 private lands will have a FSMP.*
- *More than 30,000 native trees have been propagated of which 8,582 has been delivered and planted to improve wildlife habitat and stablish biological corridors in private lands affected by hurricane season in 2017. 10,000 native trees will be propagated during FY21 and 22 to continue these efforts in the future.*
 - *In collaboration with US Fish and Wildlife Service, 3 Stahlia monosperma populations (an endangered tree species) has been established in private lands with 170 individuals.*
- *Workshops and trainings will be provided to landowners to increase landowner fire prevention; and to reduce fire hazard by the implementation of debris removal, fire breaks, waste management and compost development. This will be implemented during FY 21 and 22 following the recommended standards to prevent the Covid 19 spread.*
- *Monitoring activities are planned to start in FY 21 on each private land participating of the JCLRP in Puerto Rico. This component includes 3 monitoring activities per private lands using volunteers and the community in small groups following the recommended standards to prevent the Covid 19 spread.*

Community Benefits

The proposed project area is located within the central mountain range of western Puerto Rico (see appendix 4), and is comprised of six watersheds (i.e., Río Grande de Añasco, Río Guanajibo, Río Culebrinas, Río Guajataca, Río Camuy and Río Grande de Arecibo). The numerous rural mountain communities within the focus area have extensive agricultural roots and host several significant cultural areas. The more important coffee production area in the Island in found in this zone. Other important agricultural products in production in this zone are citrus, plantains and hayland among others. This project is injecting an economic stimulus through investment in local landowner-based conservation and ecologically sustainable agroforestry and native tree planting, in

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



addition to enhancing the habitat that support endangered species, promoting sustainable forests and agricultural lands management, and the protection of wildlife, soils and water supplies is supporting the local economic growth. Additionally, several outreach activities, including volunteer and educational opportunities (planned for FY21 and FY22) are aimed specifically at regional landowners and community groups to further promote stewardship of the region's natural resources at the public level.

Photos, News Articles, and Press Releases

See Appendix 4 for press releases, articles and photos.

Local NRCS webpage for the JCLRP: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/pr/programs/landscape/>

*US Forest Service: Inside the Forest Service Article submitted by the IITF- State and Private Forestry:
<https://www.fs.usda.gov/inside-fs/delivering-mission/sustain/joint-chief-initiative-crucial-landscape-and-wildlife>*

Partner Support and Involvement

Partner	Dollars	In-Kind Labor	In-Kind Other	Total FY18–20
NRCS Caribbean Area	\$800,887.80		TA: \$57,641.94	\$858,529.74
US Forest Service (IITF)	\$1,541,406		TA: \$84,000 (estimated)	\$1,541,406
Envirosurvey, Inc.			\$17,500.00	\$17,500.00
Cafiesencia, Inc		\$8,750.00	\$8,750.00	\$17,500.00
Protectores de Cuencas, Inc.			\$75,000.00	\$75,000.00
Protectores de Cuencas, Inc.		\$36,250.00		\$36,250.00
Para La Naturaleza			\$20,000.00	\$20,000.00
Project Totals	\$2,342,293.80	\$45,000.00	\$262,891.94	\$2,566,185.74

1. Concisely describe how these partnerships were formed. For example, were they formed in order to compete for Joint Chiefs' funding or were they pre-existing? How was it determined what partners would be engage on this project?
 - *The partnership between the 8 entities working in this Initiative were formed through the NRCS State Technical Committee- Forestry, Wetlands, and Wildlife Subcommittee in Puerto Rico. The initial proposal was developed by this subcommittee in close collaboration with NRCS, US Forest Service and US Fish and Wildlife Service.*

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



- *The partners suggested the components of the Initiative where they can be involved. After the proposal was approved and funded in 2017, a meeting was coordinated with all the potential partners and decisions were made between all to organize the works. A monthly meeting and conference calls have been conducted from 2017 until now for coordination. NRCS and IITF staff coordinated the meetings and calls to discuss updates, issues, specials cases, and other topics to keep the Initiative running and focus on objectives.*
- 2. Concisely describe how this project enabled you to achieve higher quality or more effective outcomes than could have been accomplished by a single agency.
 - *All partners have been working together for many years in conservation initiatives, in the project area and other areas in Puerto Rico. The Joint Chiefs' project provided a venue to work together in hurricane recovery initiatives to benefit targeted species and areas that were previously included as priorities for these groups and confirmed by the NRCS State Technical Committee- Forestry, Wetlands, and Wildlife Subcommittee.*
 - *The collaboration between agencies such as US Fish and Wildlife Service, PR Department of Natural and Environmental Resources, NRCS, US Forest Service (ITTF) and partners allowed to implement actions that federal and state agencies cannot implement by themselves in an short period of time such as plant material propagation, develop a considerable amount of Forest Stewardship Management Plans, monitoring activities and multiple site visits and land evaluations.*
- 3. Concisely describe a unique or significant way your partnership was able to leverage technical, financial, or social resources through coordination of activities.
 - *The Initiative has helped strengthen the relationship and communication between NRCS, US Forest Service, US Fish and Wildlife Service, the Conservation Districts, partners in general and local State agency PR DNER, overcoming barriers like permits and regulations that were and issue before due to lack of communications and coordination.*
 - *Monthly meeting and conference calls allowed the agencies and partners to coordinate the actions and activities needed for the success of this Initiative.*

Partners involvement:

- *NRCS Caribbean: Technical assistance and financial aid for conservation practices trough conservation plans and contracts with private landowners.*

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



- *US Forest Service- International Institute of Tropical Forestry: Technical assistance, administration of Cooperative Agreement with Distrito Suroeste de Conservacion de Suelos y Aguas to implement the project (TA: SPF Program Manager time estimated calculation).*
- *Distrito Suroeste de Conservacion de Suelos y Agua: Project administration, inspection of all project components, contracting with partners, and monitoring project development.*
- *Cafiesencia: Developed Forest Stewardship Management Plans for private landowners within the JCLRP project area.*
- *Envirosurvey, Inc: Plant material for shade coffee projects (agroforestry) for private landowners within the coffee zone and inside the project area.*
- *Protectores de Cuenca, Inc: (1) Fire Prevention Workshops for private landowners, community groups, and conservation entities to reduce fire hazard and improving protection capabilities and response capacity; (2) Production of previously selected native plant material to benefit targeted species and conservation goals.*
- *Para La Naturaleza: Design and implement long monitoring activities in properties participating of the initiative in a collaborative approach including private landowners and community volunteers, including training.*

Project Accomplishments:

1. Enter your FY20 accomplishments on National Forests in FACTS. N/A

2. In the following tables, report total project accomplishments for FY20 and for the entirety of the project period (FY18-20).

Activity/Treatment	FY18	FY19	FY 20
Total acres of Private Lands on NRCS contracts*	714.2	1,513.1	778
Total Acres with Forest Stewardship Management Plans **	--	458	1,428
Total trees delivered and planted in FY18, 19 and 2020			8, 582
New population of <i>Stahlia monosperma</i> planted in private lands	--	1	2

* See appendix 2 for mor details

** Please refer to progress report included in attachments

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Lessons Learned

The Puerto Rico Landscape Scale Restoration Initiative to Establish Biological Corridors and Restore Ecosystem Functionality after the Impact of a Major Hurricane in the Caribbean Area demonstrated federal, state, and local nongovernmental groups can work together and implement successful project working on common goals and objectives. The project area has been a priority for all these groups. The area was classified as a priority area in the Puerto Rico State Forest Action Plan and within the Maricao/Guanica Priority Landscape. Lack of dedicated funding delayed working in the area and the Joint Chiefs' offered an opportunity to working in the area.

This Initiative demonstrate that communication between Federal Agencies and their partners focusing on the same objectives towards the management, enhancement, and preservation of the natural resources build a strong relationship, trust and respect that reflects on the work and effort from private landowners and individuals implementing conservation practices. The results of this is an improvement of habitat for wildlife in general, increment of natural areas and water quality, and the aesthetics of the environment. Ensuring a better present for all of us and a hope for a better future for generations to come.

Signatures

NRCS, title

Forest Service, title

**Joint Chiefs' Landscape Restoration Partnership Project
FY 2020 Final Report**



Appendix 1. List of entities participating in the Caribbean Joint Chefs Landscape Restoration Partnerships

Entity	Link
1. Cafiesencia	https://www.cafipr.org/
2. Centro para la Conservación del Paisaje	https://www.facebook.com/manejoregional/
3. Distrito de Conservación de Suelos y Agua del Suroeste, Inc.	https://www.facebook.com/distritodeconservacion.delsuroeste
4. PR Department of Natural and Environmental Resources	http://www.drna.pr.gov/
5. Envirosurvey Inc.	http://www.envirosurveypuertorico.org
6. Para La Naturaleza, Inc.	https://www.paralanaturaleza.org/en/
7. Protectores de Cuencas, Inc.	https://www.protectoresdecuencas.org/
8. US Fish and Wildlife Service	https://www.fws.gov/southeast/caribbean/
9. US Forest Service, International Institute of Tropical Forest	https://www.fs.usda.gov/iitf/
10. Natural Resources Conservation Service - Caribbean Area	https://www.nrcs.usda.gov/wps/portal/nrcs/main/pr/programs/landscape/

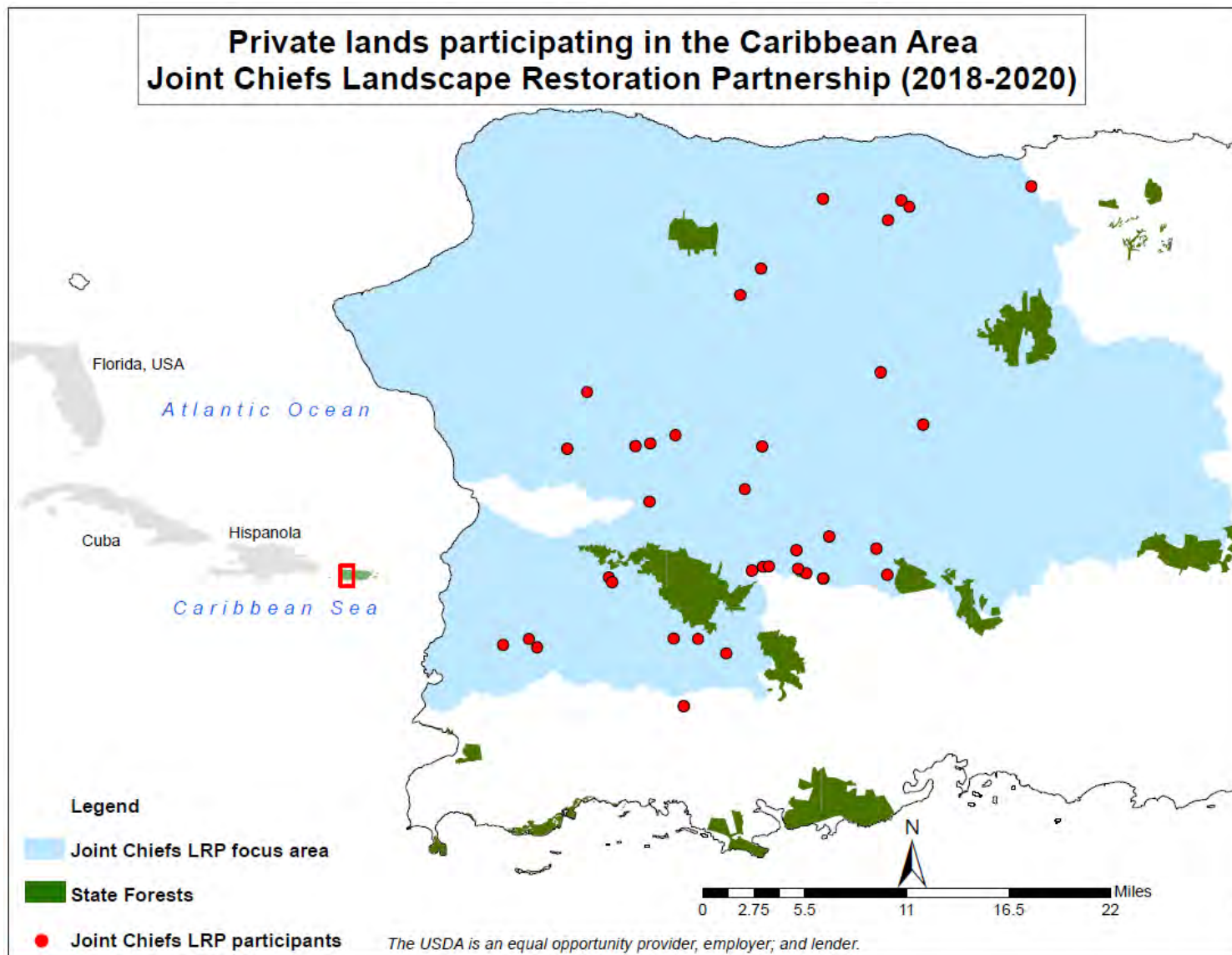
**Joint Chiefs' Landscape Restoration Partnership Project
FY 2020 Final Report**



Appendix 3: Forest Stewardship Management Plans Data (Total)

Joint Chiefs' Landscape Scale Restoration Partnership Forest Stewardship Management Plans	Total
# landowners receiving technical assistance	41
# acres receiving technical assistance	3,302.6
# landowners pending technical assistance	12
# acres pending technical assistance	1,339.7
# management plans completed	11
# acres in management plan completed	1,886
# management plans delivered	11
# acres in management plans delivered	1,886
# management plans pending approval	2
# acres in management plans pending approval	143.3
# management plans in progress 2021	11
# acres in management plans in progress 2021	428.7
# management plans planned for 2021	27
# acres in management plans planned for 2021	2,063.7
# native trees produced	30,090
# trees distributed	7,649

Appendix 4. Location of the Joint Chiefs LRP focus area and private land participating in Puerto Rico.



Appendix 5. Photos of Projects Activities

Activities performed to deliver Forest Stewardship Management Plan to six farmers.



Protectores de Cuencas, Inc.'s nursery and native trees delivery activities



Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Private Lands Evaluations and Native Trees Delivery Activities



Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Monthly Partners Meetings



Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Press release related to the Caribbean Area Joint Chiefs Landscape Restoration Partnership

Electronic version of this press release available at: <https://content.govdelivery.com/accounts/USDANRCS/bulletins/1d3c111>



United States Department of Agriculture

Natural Resources Conservation Service

Caribbean Area



Release No.: 2018-06

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News Release

USDA Invests Millions in Wildfire Mitigation and Water Quality Projects through Joint Chiefs' Partnership

San Juan, PR, January 11, 2021 – The U.S. Department of Agriculture (USDA) will invest nearly \$32 million this year to mitigate wildfire risk, improve water quality and restore healthy forest ecosystems in 24 states and Puerto Rico. More than \$225,000 of that funding will support a forestry project in Puerto Rico.



Strategic Investments across Landscapes

Since 2013, USDA has invested \$176 million in 56 Joint Chiefs' Landscape Restoration Partnership projects, which focus on areas where public forests and grasslands intersect with privately-owned lands.

"Through Joint Chiefs, the Natural Resources Conservation Service (NRCS) works with agricultural producers and forest landowners to improve forest health using available Farm Bill conservation programs, and the Forest Service enhances forest health on public lands -- stitching together a larger footprint of healthy ecosystems in priority areas," said NRCS Caribbean Area Director, Edwin Almodóvar.

"Hurricanes and wildfires are a serious and on-going threat to forests and communities alike, as we've seen in the Caribbean and California this year," said Dr. Ariel Lugo, Director of the International Institute of Tropical Forestry. "Through these Joint Chiefs' projects, USDA will be working with local partners in high-risk project areas to control invasive species, install fire breaks and implement other targeted forest management practices to help mitigate the risk of storms and wildfires."

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USDA Invests Millions in Wildfire Mitigation and Water Quality Projects through Joint Chiefs' Partnership Page 2

Along with mitigating fire risk, Joint Chiefs' projects work to improve water quality by restoring healthy forests and grasslands.

In the Caribbean Area, the funding will support a **Landscape-scale Restoration Initiative to Establish Biological Corridors and Restore Ecosystem Functionality** in six of Puerto Rico's watersheds impacted by Hurricane María. The project will address soil erosion, water quality and soil health, fire mitigation, and habitat improvement for at-risk species. The project will implement conservation practices such as vegetation establishment and tree planting, erosion control, nutrient and waste management, fire break and wind break establishment, native species propagation for agroforestry and forest enhancement, habitat restoration for targeted species, debris and obstruction removal, and many others. These actions will mitigate the impacts of extreme events. Project partners include Caribbean Area NRCS; EnviroSurvey, Inc.; Cafesencia, Inc.; Protectores de Cuencas, Inc.; Puerto Rico Conservation Trust; Para la Naturaleza; and the USFWS Caribbean Ecological Services Field Office.

Private woodland owners in these project areas may be eligible for financial assistance from the NRCS to help them perform forest conservation practices on their land. Contact your local USDA Service Center to learn more.

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Links for articles related to the Caribbean Area Joint Chiefs Landscape Restoration Partnership

1. [Utuado FO Coordinates Tree Delivery to Farmers to Establish Riparian Buffers \(sep-oct 2020\)](#)
2. [NRCS Shade-Grown Coffee Initiative Still Going Strong During COVID19 \(jul-aug 2020\)](#)
3. [La iniciativa de NRCS del café cultivado en la sombra sigue fuerte durante COVID19 \(jul-ago 2020\)](#)
4. [Entrega de árboles de cultivo en Guayanilla \(nov-dic 2019\)](#)
5. [Guayanilla Multistory Cropping Tree Delivery \(nov-dec 2020\)](#)
6. [NRCS y EnviroSurvey entregan 13,000 árboles de sombra a los caficultores PR \(sep-oct 2019\)](#)
7. [El Proyecto de “Joint Chiefs” para la Restauración del Paisaje entrega más de 6,000 árboles \(sep-oct 2019\)](#)
8. [NRCS and EnviroSurvey deliver 13,000 shade trees to PR coffee farmers \(sep-oct 2019\)](#)
9. [Joint Chiefs Landscape Restoration Partnership Project delivers over 6,000 trees to PR farmers \(sep-oct 2019\)](#)
10. [Programa de Reforestación “Joint Chiefs” – Sabana Grande \(jul-ago 2019\)](#)
11. [Programa de Reforestación “Joint Chiefs” – Hatillo \(jul-ago 2019\)](#)
12. [Joint Chiefs Restoration Partnership Program – Sabana Grande \(jul-aug 2019\)](#)
13. [Joint Chiefs Restoration Partnership - Hatillo \(jul-aug 2019\)](#)
14. [NRCS entrega árboles de sombra a los productores de café de Utuado \(may-jun 2019\)](#)
15. [NRCS Delivers Shade Trees to Utuado Coffee Producers \(may-jun 2019\)](#)
16. [El NRCS ayuda a entregar árboles nativos para el café de sombra a los agricultores locales \(jul-sep 2018\)](#)
17. [Asociación para la Restauración del Paisaje de los esfuerzos interagenciales “Joint Chiefs” \(jul-sep 2018\)](#)
18. [NRCS Helps Deliver Native Trees for Shade Coffee to Local Farmers \(jul-sep 2018\)](#)
19. [Joint Chiefs' Landscape Restoration Partnership in the Caribbean Area \(jul-sep 2018\)](#)

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report

Some articles published in the NRCS Caribbean Area Newsletter

Joint Chiefs' Landscape Restoration Partnership in the Caribbean Area



Four endemic, endangered species to be targeted by Joint Chiefs' project.

NRCS Caribbean Area kicked off the **Joint Chiefs' Landscape Restoration Partnership (LRP)** on September 12th at the Utuado Field Office. NRCS, the **Forest Service** and the **US Fish & Wildlife Service (FWS)** are partnering to target conservation and restoration to measurably improve the health and resiliency of forest ecosystems where public and private lands meet to provide long-term benefits to natural resources and production.

Initiative priorities are to:

- Reduce and mitigate wildfire threats to communities and landowners;
- Protect water quality and supply for communities and industry; and
- Improve habitat quality for at-risk or ecosystem surrogate species.

In the Caribbean Area, the initiative will focus on establishing biological corridors and restoring ecosystem functionality after the impact of hurricane María in Puerto Rico. The planned project area is located within the central mountain range of western Puerto Rico, and includes the Río Grande de Añasco, Río Guanajibo, Río Culebrinas, Río Guajataca, Río Camuy and Río Grande de Arecibo watersheds. [Read more...](#)

[^ back to top](#)

Joint Chiefs Restoration Partnership Program – Sabana Grande

NRCS and conservation partners Suroeste SCD, USDA Forest Service, US Fish & Wildlife Service, EnviroSurvey Inc. and Protectores de Cuencas, Inc., delivered **461** shade trees on 30 August 2019 to Estancia Providencia Inc (Rancho AA) in Sabana Grande, PR, as part of our **Joint Chiefs**

Restoration Partnership Initiative. The farmers will plant the *Bucida buceras* (úcar, gre-gre, black olive), *Citharexylum spinosum* (péndula), *Tabebuia heterophylla* (roble blanco, pink cedar), *Cordia alliodora* (cápa prieto, Spanish elm), and *Stahlia monosperma* (Cobana Negra) trees to create ecological corridors for wildlife and improve habitat on their cattle and horse ranch. Right: NRCS and

Conservation Partners in action. (Right: **Carlos J. Cruz (Protectores de Cuencas, Inc.)**, **Protectores de Cuencas** employee, **Jayson Más (NRCS)**, and **José G. Martínez (USFWS)**.)



[^ back to top](#)

Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report



Some articles published in the NRCS Caribbean Area Newsletter

Joint Chiefs Restoration Partnership - Hatillo

On August 16th NRCS and our conservation partners delivered **1,088** shade trees to Milk Money Inc Dairy in Hatillo, PR, as part of our **Joint Chiefs Restoration Partnership Initiative** (right). The initiative helps farmers to incorporate ecological corridors for wildlife and improve habitat on their land. The trees will be planted for riparian buffers and wildlife corridors. Tree species distributed included:

- *Bucida buceras* (úcar, gre-gre, black olive)
- *Bursera cimaruba* (almácigo, turpentine)
- *Calophyllum antillanum* (María galba)
- *Citharexylum spinosum* (péndula)
- *Colubrina arborescens* (jaboncillo, maubi)
- *Colubrina elliptica* (maví, maubi)
- *Cordia dentata* (white manjack)
- *Cordia rickseckerii* (lija, orange manjack)
- *Guazuma ulmifolia* (guácima)
- *Tabebuia heterophylla* (roble blanco, pink cedar)



[^ back to top](#)

Joint Chiefs Landscape Restoration Partnership Project delivers over 6,000 trees to PR farmers

NRCS and partners delivered thousands of trees to PR farmers throughout the months of September and October as part of our first **Joint Chiefs Landscape Restoration Partnership Initiative (JCI)** project. The project began in Dec. 2017 in the wake of the devastation wreaked by hurricanes Irma and María. Entitled **"Establish biological corridors and restore ecosystem functionality after the impact of a major hurricane in the Caribbean,"** the JCI project is in year two of its three-year project period. (Right: Omar Báez (NRCS SCT-Arecibo) helps deliver trees to Estancia Santa Rita in Camuy as part of Joint Chiefs Initiative -18 Oct 2019.)



Accomplishments for this project to date include:

- **20** farms under NRCS conservation contracts;
- **6** Stewardship Management Plans completed by Cafiesencia (subcontracted by SWCD and the US Forest Service) and **4** in-progress;
- **6,069** native trees delivered and planted under this Initiative (by PDC subcontracted by SWCD and US Forest Service; and by EnviroSurvey under coop agreement with NRCS);
- Completed project implementation monitoring plan for the 24 farms for three years. Monitoring to begin January 2020 by Para La Naturaleza (subcontracted by SWCD and US Forest Service). [Read more...](#)

[^ back to top](#)



Joint Chiefs' Landscape Restoration Partnership Project FY 2020 Final Report

Enclosures:

- (1) 18CA11120107043 progress report 12.31.2019
- (2) Progress Report JCI 1st semester 2020