Regenerating the Juluchuca Watershed
- A Whole Systems Approach

ReSiMar

Regenerando Sierra y Mar
de la Cuenca de Juluchuca

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A unique opportunity to fund a holistic, community-driven regenerative shift for human health, biodiversity, abundant natural resources, and strong local culture and economies.

Summary

The Juluchuca watershed, located on a long expanse of undeveloped coast just south of the Ixtapa / Zihuatanejo resort area, in Guerrero, Mexico, is the site of a spirited, systemic effort to regenerate the environment, economy and community wellbeing. A team of experienced, multi-disciplinary practitioners have come together from Juluchuca proper, across Mexico, and the US, to support the formation of ReSiMar and its regenerative vision. Emblematic of so many Mexican coastal watersheds, where environmental degradation is heightened by limited economic opportunity and forced migration, ReSiMar grows as a "hope spot" and model for regenerating coastal Guerrero and coastal Mexico's remarkable natural and human abundance. Our holistic approach focuses on five interconnected nodes:

Water Culture & Resources

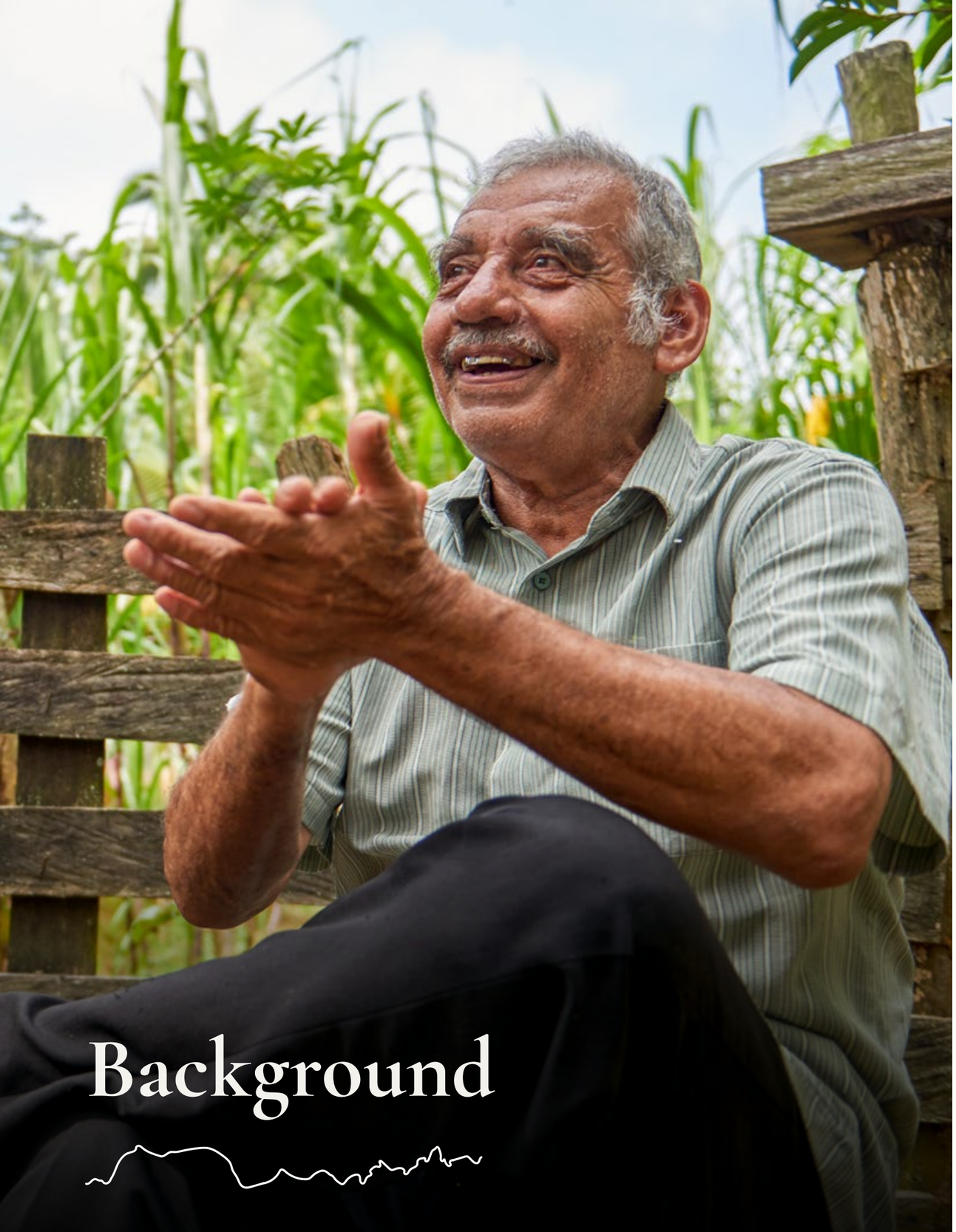
Education

Permaculture

Fisheries

Ecosystem Restoration

Along with several cross-cutting focal areas including Community Governance, Inclusion, Story-telling, and Innovative Finance and Business Models. With over 12 years of experience working in Juluchuca, Hotel Playa Viva and its deep community roots have planted seeds of change and established trusting relationships with community members. Now, with a growing network of ReSiMar partners, it's time to build upon this strong foundation to facilitate large-scale, community-driven transformation both for human wellbeing and environmental abundance, for Guerrero, and as a necessary lab for systems change along Mexico's coasts.



Background

Guerrero State

The state of Guerrero, between Mexico City and the Pacific Ocean, with its iconic Acapulco and Ixtapa-Zihuatanejo destinations, is characterized by rugged coastlines, lush mountains and a wealth of biodiversity. The peaks of the Sierra Madre del Sur mountain range make communication difficult within the state, hampering economic development and marginalizing much of the rural population. Guerrero consistently ranks as one of Mexico's most impoverished states, a reality complicated and compounded by its history of government corruption, cartel violence and state impunity. As a lead icon of the broad challenges that face rural Mexico, Guerrero's communities and ecosystems have received woefully limited attention; Playa Viva's experience indicates that care, determination, strategy and patience can yield remarkable effects that deserve to be scaled-up, for Guerrero's people and nature, and to capture the rich potential of Mexico.

Why Guerrero? We are leveraging the success of Playa Viva, whose team has built relationships in the local communities over the past 13 years. Guerrero is under-represented and underdeveloped and the residents of the Juluchuca watershed are eager to work together to create real impact.

Juluchuca Microwatershed

The Juluchuca microwatershed (part of the larger Cuenca Rio Tule) is located in the Costa Grande Region of Guerrero. It is characterized by semi-dry tropical forests in the Sierra Madre mountains, extensive coastal plains and lagoons, estuaries, mangrove forests, and a temperate oceanic environment and is a designated "conservation priority site" by Mexico's CONABIO[1] and CONANP[2]. Locals speak of jaguars still high in the mountains, crocodiles abound in coastal lagoons, and sea turtles nest by the thousands on the shores; these are remarkable systems.

The area, always focused on primary production like artisanal fisheries, salt production, agriculture and cattle ranching, has been buffeted by poverty and resource decline over the years - including boom and bust with world coconut markets.

Despite this, local residents remain resilient and eager to write a new chapter of hope and prosperity for their communities. They value the immense beauty of the region, from the lush, threatened, forests at the highest peaks to an ocean environment once-teeming with life, while at the same time recognizing the human pressure on these natural resources.

Over the years, ecological degradation in the watershed has been driven by expanded cattle ranching and medium-scale farming, leading to the deforestation of coastal and highland forests and significant biodiversity loss. Many families rely on the annual harvests of a few commodity crops such as coconut and mango, yet each year their orchards require more intensive care as annual rainfall becomes more unpredictable. Farmers have increasingly turned to agrochemicals to try to guarantee their harvests, yet they recognize that long-term, these interventions do more harm than good to their land. With many people's land already degraded, agrochemicals have become an unfortunate necessity for essentially all farmers. Unpredictable market prices for other products such as tomatoes, chiles, or sesame make it difficult for future generations to even want to consider farming in their future. As the challenges of agricultural work compound, many residents look to emigrate to the US as a viable solution to support their families. Yet the cost is extremely high - many risk their lives crossing the border without papers and then remain in the US for years; when this happens across a generation it can dramatically alter the social fabric of a community.

1 Arriaga Cabrera L, et al. 2009. Regiones prioritarias y planeación para la conservación de la biodiversidad, en Capital natural de México, Vol II: Estado de conservación y tendencias de cambio. CONABIO, México, pp. 433-457
2 "Ficha técnica 43 Playas de Petacalco-Piedras de Tlacoyunque" para la evaluación de los sitios prioritarios para la conservación de los ambientes costeros y oceánico de México. CONABIO, TNC, CONANP, Pronatura Noroeste. 2007. 5 pp.

Playa Viva

Following years of conservation efforts focused on jaguar protection and developing the Rainforest2Reefs program, in 2005, David Leventhal and his family bought an 86 hectare farm near Juluchuca with an intention to regenerate it, designating part to conservation/restoration, part to permaculture farming, and part to a hospitality venture on the beach. Playa Viva opened in 2008 as a Regenerative Boutique Hotel and has since garnered significant international attention for its model, including recognition in the NY Times and Travel + Leisure Magazine Global Impact Award for Regenerative Travel Inc, the hotel collection founded on Playa Viva's principles.

Playa Viva's five Core Values: Promote Biodiversity, Create Cleaner and More Abundant Water and Energy, Promote Transformational Experiences, Create Meaningful Community, and Provide a Living Legacy.

The hotel funds a Social and Environmental Impact team to support the local community through education and ecosystem improvements. Back in 2007, Playa Viva conducted a "history of place" assessment which included a study of geological and archaeological history and numerous interviews with local elders. This study, in turn, helped drive the creation of Playa Viva's five Core Values: Promote Biodiversity, Create Cleaner and More Abundant Water and Energy, Promote Transformational Experiences, Create Meaningful Community, and Provide a Living Legacy.

Impact to Date

Playa Viva's innovative and holistic model funds a Social and Environmental Impact team, La Tortuga Viva Sea Turtle Sanctuary, and the hotel's Permaculture farm. Playa Viva's Education Program provides English classes and classroom support to six schools in Juluchuca, Rancho Nuevo, La Ceiba and Las Placitas, reaching over 150 students every week. Through the Adopt a Student Program, 22 local students have had their education financed over the past two years. Other Playa Viva sponsored extracurricular activities including the youth soccer team, art classes, nature walks and beach clean-ups engage and unite youth and their families throughout the Juluchuca micro -watershed. Playa Viva's Sea Turtle Sanctuary, La Tortuga Viva (LTV), run by 14 members of the local community, also engages the local community in environmental education, and since 2010, LTV has successfully protected and released over 500,000 sea turtle hatchlings including the highly endangered Leatherback. Each year, the Social and Environmental Impact Team publishes an annual impact report with key achievements which is available upon request.

On Playa Viva's Farm, the Permaculture Program plants about 1000 trees annually and produces about 1500 kilos of fruits and vegetables each year. It is a living laboratory, co-led by experienced permaculture practitioners and local agriculturalists (the "Farm Team") who together experiment with crops and production methods that could be scaled - in markets and acreages - for better earnings and healthier agriculture in the watershed. The team trains local youth in organic, syntropic and biodynamic farming, raising of animals, and production of construction materials, including sustainably harvested bamboo and palapa. The Permaculture Program also leads community engagement programs aimed at addressing public health issues in the watershed.

6 Schools

Receive English classes and classrom support

150 Students

Reached each week

22 Students

Have had their education financed.

500,000 Sea Turtles

Protected and released, including the highly endangered Leatherback.

1000 Trees

Planted annually

1500 kg Produce

Harvested annually

What's Next

An Emergent Regenerative Watershed Network

Playa Viva's regenerative model has shown that holistic, triple bottom line ambitions do work, both for the business and the local community. However, in order to scale and achieve transformational change in a watershed deeply impacted by environmental degradation, out-migration, and limited economic opportunities, one business alone cannot sustain the larger investment needed to generate watershed-level change and a long-term and deep-rooted shift in the larger community and ecosystem.

To explore how to collaborate for systemic, holistic change in coastal watersheds, a group of experienced practitioners from diverse fields came together in early 2021 at Playa Viva, including team members from LegacyWorks Group, Radix Education and the Fondo para la Comunicacion y Educacion Ambiental. Impressed by the deep connections and significant presence of Playa Viva in the Juluchuca micro-watershed and the eagerness of local residents to work together, this group expeditiously formed the ReSiMar working group to grow the Juluchuca micro-watershed as a "hope spot" in the Mexican Pacific region for holistic, regenerative transformation.

The group posits that this whole system / whole watershed approach applies to a broad set of watersheds along the Pacific Coast, and in fact, was underway in various other "labs" as far north as Baja California Sur and nearby in Oaxaca. Thus, the collective design and efforts extend beyond the Juluchuca watershed. To capitalize on these connections, we formed an emergent Regenerative Watershed Network to foster active learning, engagement and capacity-building of local leaders, and sharing of best practices within and between watershed communities in the Mexican Pacific Region.

Our Vision

A Whole-Systems Approach to Change

The vision statement being worked and refined with the Juluchuca community is:

A community and economy that understand the social and ecological systems that determine the wellbeing of society and the natural environment; completely committed to seeking social and ecological health as the defining element that identifies the culture of place, such that the good of the people will not be sacrificed for the good of the land, nor the good of the land for the good of the people but rather a path is sought that honors and regenerates both, where each action creates greater wellbeing and more options for a collective future. Our work is carried it out in five interrelated, multi-disciplinary "nodes" with several cross-cutting focal areas.

Nodes

- Water Culture & Resources
- Education
- Permaculture
- Fisheries
- Ecosystem Restoration

Focal Areas

- Community Governance/Participatory Democracy
- Inclusion
- Storytelling
- Innovative Finance and Business Models

The Team

Our ReSiMar team counts on the strategic guidance of the following partners, among many other collaborators and staff:

Education

- Erik Ramirez Ruiz

  CEO of Radix Education, founder of Enseña por Mexico (Mexico's Teach for All Chapter).

- Patricia Vázquez del Mercado

  Advisor at Radix Education, former Secretary of Education of the state of Puebla.

- Ariel Arguedas Fernandez

  Education Coordinator at Playa Viva, with strong ties to families, students and schools throughout the Juluchuca micro-watershed.

- Belen Alonso Pineda

  Education leader within the watershed spearheading new education initiatives in his hometown, La Ceiba and beyond.

Community & Conservation/Resource Management

- Pablo Castro Moreno

  Fisheries expert at LegacyWorks Group and former Project Director with Pronatura Noroeste

- Maria Teresa Gutierrez

  Director of Fondo para La Comunicacion y Educacion Ambiental (FCEA) and leader in water culture and management

Impact Investment & Philanthropy:

- Martin Goebel

  Mexico Director for LegacyWorks Group, Founder of Sustainable Northwest, former Country Director of WWF Mexico and founder of the Fondo Mexicano para la Conservación de la Naturaleza.

- Josephine Korijn

  Co-founder of New AJE Capital which focuses on solutions that regenerate resilient ecosystems within the agricultural and food systems; and co-COO at Renewable Resources Group Solutions which incubates and finances businesses that include smallholder farmers in the regenerative agriculture supply chain.

- Gabriela Anaya

  Gabriela Anaya, Environmental and Philanthropic advisor, former Executive Director of Niparajá and CONANP Park Director.

Regenerative Tourism:

- David Leventhal

  Owner of Playa Viva and co-founder of Regenerative Resorts.

- Julia Garcia

  General Manager of Playa Viva hotel. Julia is both a Juluchuca native and deeply connected to the community, and an experienced hotel industry manager with international experience with the ClubMed group.

Permaculture

- Amanda Harris

  Permaculture Manager at Playa Viva; 10 years working alongside rural agrarian communities, developing natural resource management strategies for land and water-based organizations, and transforming profitable farms into internationally recognized education centers.

- Nick Wolf

  Regenerative Agriculture and Community Development specialist, longtime resident of Zihuatanejo and co-founder and board member of Eco-Tianguis Farmer's Market

Strategic Coordination

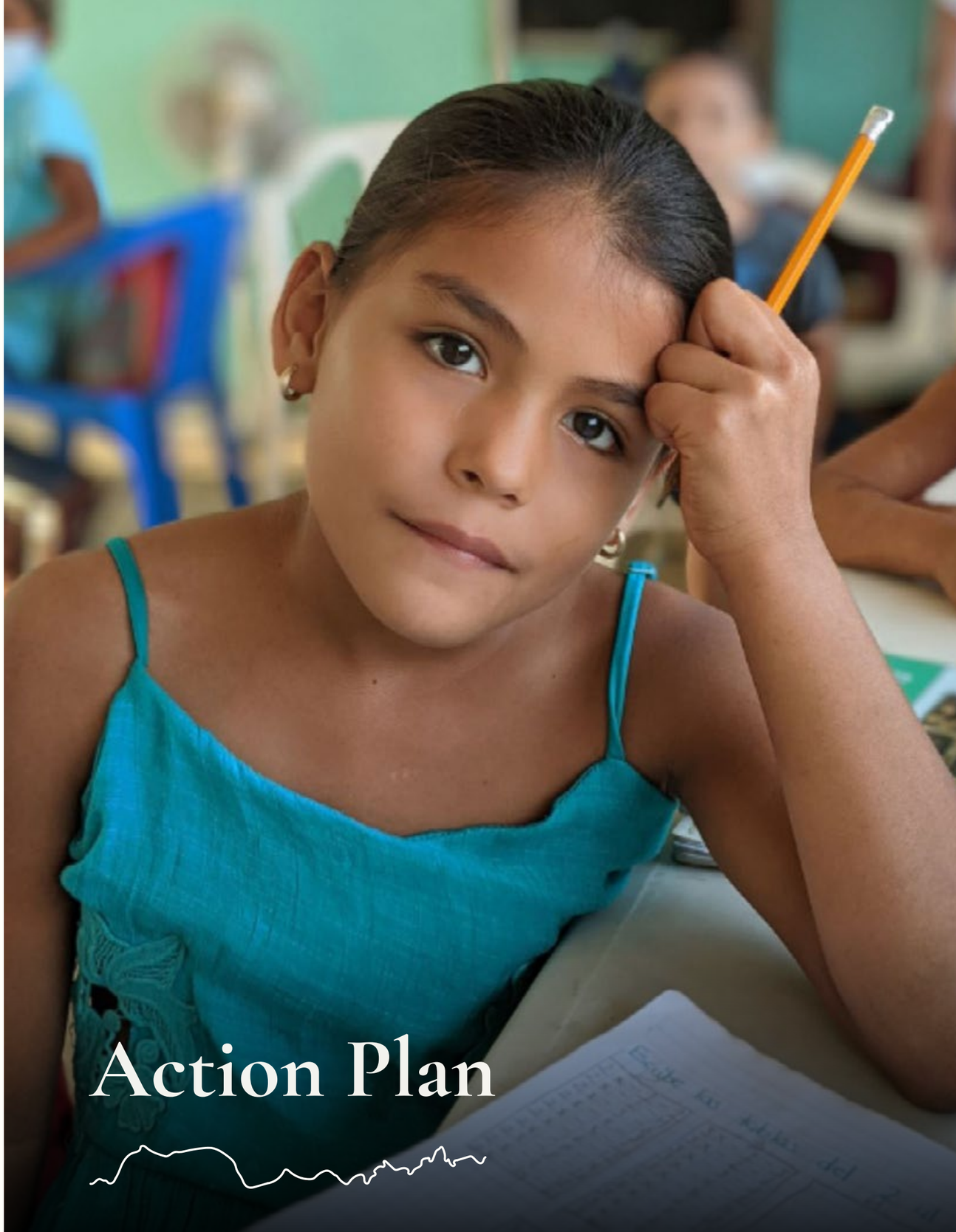
- Colleen Fugate

  Social and Environmental Impact Manager at Playa Viva. Colleen has been responsible for growing, managing and integrating Playa Viva's diverse efforts toward a coherent, institutional whole reflected in the ReSiMar concept.

- James Honey

  Program Director for LegacyWorks Group; 20 years in rural sustainable development, community governance and conservation, and more recently, management or development of hybrid business models to finance conservation in the US West, Mexico and Costa Rica.

Regular convenings and evolving work is intended to increase capacity and co-creation. For example, the Latin American program of National Geographic Explorers, the local group Whales of Guerrero, and several others have been briefed on the model and have expressed interest in collaborating as the efforts grow.



Action Plan

In the next 12-24 months we intend to work in 2 primary tracks:

Track 1: Community and Environmental Assessments

Our first focus is on conducting robust community and environmental assessments - including baselines - in the Juluchuca micro-watershed (sea and land) and to access existing information about education, conservation and coastal management, and agricultural economy in the region.

- Our community assessment will focus on education, health, social cohesion, economy, and local governance to provide robust data for strategic planning.
- Our environmental assessment will focus on natural capital including a hydrological assessment, forest and vegetation cover, including mangroves, marine and terrestrial biodiversity and target ecosystem processes / sensitive species, and key fish stocks.
- Finally, we will conduct market assessments to explore how we can foster the creation of more circular green businesses today and tomorrow that will power a new regenerative system.

Each of these three assessments - human, environment and financial - will be rooted in community leadership and participation to guide how the assessments are conducted and to facilitate dissemination of results. Each will also establish baselines and key indicators to track impact. Where possible, the assessment and baseline work will also be supported by literature and applicable published strategic action frameworks (e.g. mangrove protection strategies recommended by RAMSAR, or forest management frameworks in neighboring Mexican states). Finally, we plan to create community advisory groups for each node, including elected leaders, key stakeholders and underrepresented groups to ensure broad perspectives in decision-making processes.

Preparation of Green Climate Fund Documentation: All biophysical and conservation baselines are needed to establish the context of need and opportunity for ReSiMar to be included in the Fondo Mexicano's planned 2023/24 submission to the Green Climate Fund. In addition to this key information that allows precise characterization of participating areas, ReSiMar will need to establish a framework and baseline for carbon capture, both blue and green, consistent with its planned or ongoing restoration and permaculture activity.

Track 2: Testing and Implementing Early Interventions

Results from baseline assessments will be analyzed by the ReSiMar team and community advisory groups; key findings will be shared with the communities in Track 2. Together we will develop a strategic plan to implement and test several early interventions based on results from the assessments. Below we outline the initial vision statements for each node, and the early interventions that are being set in motion during this period.

Education

Vision: Educational harmony in which all children, young people, and adults are able to finish their compulsory education with the competencies and personal development necessary to live a full and quality life in balance with their environment, their inheritance, and their history.

Early stage interventions

- Development of Regenerative Education Curriculum.
- Capacity building program with local teachers in the watershed.
- Implementation of a new Water Curriculum in conjunction with FCEA.
- Laboratory of Regenerative Education with international experts on the topic linked to national projects similar to Playa Viva

Water Culture and Resources

Vision: Equilibrium in use and availability of water to satisfy human needs, biodiversity, and ecosystem health to elevate the wellbeing of future generations.

Early stage interventions

- Foster participation, knowledge and coordination of water management in the Juluchuca micro-watershed; provide basic information about water availability, water uses and water dynamics to area citizens and leaders.
- Based on results of diagnostic assessments, support small, prototype, community-led interventions to manage water use and build shared understanding of water issues in the area, including regenerative agriculture techniques and household interventions to conserve water.

Fisheries

Vision: Participatory design of instruments for ecological restoration, fisheries management and development of sustainable community businesses for the management of marine and coastal resources.

Early stage interventions

- Co-design new fishing and management systems with the fishing communities.
- Develop restoration techniques to support local management of fisheries.

Ecosystem Restoration

Vision: Protect areas of ecological importance where the ecosystem can fully develop all its essential functions, ensuring the quality of water, air and soil for all the inhabitants (humans, fauna and flora) of the Tule River basin. The inhabitants of the basin value these areas as the lifelong seedbeds of the region and are fully integrated into the social and cultural fabric of the communities, who protect and celebrate them.

Early Stage Interventions

- Support landowners who wish to designate their land as voluntary conservation zones.
- Facilitate the creation of the first private conservation area in the watershed via land acquisition and support the creation of a board of local stakeholders to oversee its management.

- Co-design new fishing and management systems with the fishing communities.
- Develop restoration techniques to support local management of fisheries.

Permaculture

Vision: Communities committed to and informed about permaculture principles and regenerative agriculture concepts and a robust food hub supported by a rigorous business and financial model based on analysis of local and regional markets.

Early Stage Interventions

- Permaculture Education Center built on Playa Viva's Permaculture Farm.
- Introduction of Regenerative ranching practices.
- Capacity building of local farmers are enrolled in business development and micro-enterprises.
- An in-depth analysis of local and regional markets and key products are identified for future production from the Juluchuca watershed.

Innovative Financial and Business Models

Vision: ReSiMar's work is powered by sustainable financing mechanisms that leverage the full power of market capital, including conventional investment, impact investment, and new products. The initiative is based on a strategic blend of public, private and philanthropic capital that seeks to understand the full costs of watershed and community regeneration, and optimizes diverse capital flows for long-term stability, cost efficiency and most importantly, outcomes.

Early Stage Interventions:

- Blended capital financial models for Permaculture, Fisheries, and Upper Watershed nodes.
- Convening experts and developing a global financial model for mid-term (10-15 yr) vision.
- Establishing a business model and plan that aligns and guides decision-making in individual nodes to best complement the overarching business model.