

Partnership for Hylo as the Digital Community Platform for Regenerative Agriculture

Terran Collective + OpenTEAM + Regen Network

Statement of Work #1

This Statement of Work builds on [this partnership agreement](#) between OpenTEAM and Hylo to describe the features we will design and build together in Hylo over the next year.

Mission: Building the community infrastructure for regenerative agriculture to overgrow the system

Hylo is the coordination platform for the regenerative movement. We are building this open source tool to amplify cooperation among people regenerating our communities and our planet. One important focus of Hylo is to support people engaged in regenerative agriculture and ecosystem restoration, in order to create tangible ecological benefits like improved soil health and carbon drawdown.

Farmers and ranchers have tremendous opportunity to make a cumulative global impact in healing our biosphere, but they need help to realize this potential - they need community. Producers need community with each other, with the people who enjoy their products, and with everyone who shares their landscape. Hylo is uniquely positioned to facilitate these community relationships, while also connecting these land stewards and the people who support them to the larger regenerative movement.

The scope of work described here will grow:

- Community among farmers
- Community between farmers and the public
- Deeper connection between humans & land (bioregions)
- A greater flow of resources towards regenerative outcomes

How we will work together

Our development process will use an agile methodology, with priorities collaboratively determined and updated over time as needs change and we gather feedback from all stakeholders. This will require an evolving project management process with participation from all partners. We will start with the following process:

- A quarterly meeting to collaboratively prioritize and choose the set of features for the next season, attended by Dorn, Gregory, and other key stakeholders from OpenTEAM, Regen Network, and Hylo. Our discovery process will ask the questions: Why should this feature be in this platform? Where does this belong as a priority? What integrations or existing open-source solutions might meet this need instead of building it ourselves?
- A quarterly retrospective to check in, see how things are going, and see if we need to evolve this process of working together.
- Bi-weekly co-creation sessions: Hylo team will host these 90-minute sessions open to all the partners in this agreement. We will generate specifications for the highest priority upcoming features in the scope, with a clear agenda circulated ahead of time. These sessions will layer in with the OpenTEAM community platform series and California Farm Demonstration Network conversations.
 - These can be the OpenTEAM Community Platform meetings
 - Create user stories and personas
 - Review new designs and gather feedback
 - Probably won't be bi-weekly for the whole duration of this agreement, these will happen as needed.
- Internally the Hylo team will be doing 2 week sprints, incorporating input from all these meetings.
- We will use Hylo to communicate, supplemented by email.

Budget & Payments

OpenTEAM has agreed to contribute \$250,000 for this SOW, which is being matched by Regen Network for a total of \$500k. These funds will be held and distributed by OpenTEAM.

Ultimately we need millions of dollars to support the longer term roadmap of Hylo, and so we see this funding as the seed of a collaborative funding pool. We will work together to design a collective funding model that will make it easy for other partners to contribute to the

resourcing, prioritization and design of the work described below and our roadmap beyond that. This could include quadratic voting or similar ways of collectively deciding how to distribute shared funds.

Invoicing

Terran Collective LLC will invoice Wolfe's Neck Center monthly for work done on Hylo. Payments will be expected within 30 days of the invoice date. Terran will add in-kind/cash match to invoices according to FFAR guidance. Terran's market rate is \$150 / hour but we will bill \$80 / hour for this project so in-kind contribution will be \$70 / hour

Effective Date and Duration

This statement of work commences on July 1, 2021 and will be in effect until the budget runs out. The intention is for this budget to last one year.

Since the goal of this partnership is to seed a collective funding pool as discussed above, when this happens we will shift to a long term, rolling agreement with all partners involved.

Scope of Work and Features

Each section and feature listed here is a high level description of the work we plan to do together on Hylo, and the dollar amounts are high level estimates. Inevitably the scope (and price) will change as we define the requirements in greater detail together.

Summer Season Priorities



Embeddable Hylo group discussions for coffee shop



Resourced by Our-Sci, separate from this scope.



Desired/estimated completion: Aug/Sep

- Add an API key per group (2 person/weeks)
- Javascript snippet and/or straight iframe embed (3 person/weeks)
- Whitelisted domains where a group can be embedded in an iframe (1 person/week)

Customizable, modular profiles - \$60k

The “Rich User Profile” / “Producer Dashboard” is the key feature set we will start building together: a modular, customizable profile for farmers and producers. For this initial SOW, we will agree that Hylo is the home of profile data, while we simultaneously work on developing a decentralized Ag Data Wallet to be the eventual data store.

Features:

- Product (2 person-weeks)
 - Co-creation sessions with OpenTEAM & RND to design the feature.
- Design (2 person-weeks)
 - Design profiles for famers, ranchers and other identities in the food ecosystem, which may be different than a typical individual profile or group on Hylo. We can use the REGEN1 designs as reference, as well as the profiles already developed by RND. We will also draw on the user stories in progress with OpenTEAM.
- Front-end (6 person-weeks)
 - Flexible profile UI with customizable fields & modules
 - Add a way for custom group templates to dictate how a profile displays - which fields/modules in which order.
 - Create a farm group template based on shared designs. Handle display of custom profile fields unique to farms, and ability for farmers to edit their data.
- Back-end (4 person-weeks)
 - Develop data structures and APIs to support custom profile fields & modules and group templates
- Mobile dev (5 person-weeks)
- *Possible additional features:*
 - *Custom questions/fields per group (4 person-weeks): \$12,800*

APIs & Interoperability - \$45k

Core to our shared mission is to be part of an interoperable ecosystem of values aligned platforms working together to replace our current corporate tech silos with a decentralized web of platforms working together. We will coordinate with Greg Austic to integrate with SurveyStack with attention to AgStack as well.

Features:

- Add authentication through API keys that can be created, revoked, etc. These keys are associated with an individual Hylo account and/or Hylo group

- Design & Front-end: 2 person-weeks
 - Back-end: 4 person-weeks
- Send/Import to Hylo.
 - Initial important functionality:
 - Create an individual Hylo account for farmers
 - Create farm group
 - Invite group leaders & members to join a group
 - Import farm data from select sources like FarmOS and SurveyStack into an individual account (and/or a group profile?)
 - *Product: 1 person-week*
 - *Back-end: 4 person-weeks*
- Documentation for the API: 2 weeks
- *Possible additional features:*
 - *Pull from Hylo: Permissioned API for people to be able to query for their data from Hylo?*
 - *Permission system for different API keys to decide what data each one is allowed to access?*

Backlog of Future Possible Work Together

Features for development after Q3 2021, prioritization TBD and will be determined collectively season by season. This list includes more work than we can fit into a year and is the beginning of a longer term roadmap.

Upgraded Events - \$60k

Improving the current events functionality to include a calendar view that can be exported to Google Calendar, support for time zones and recurring events, and the basics of public event pages with ticketing.

Discovery Process: What integration or existing tool might meet this need?

Features:

- *Design: 1 week*
- Event calendar view for groups
 - Front-end: 3 weeks
 - Mobile dev: 3 weeks
- Support for time zones

- Front-end: 2 weeks
- Back-end: 1 week
- Mobile dev: 2 weeks
- Export to iCal & Google Calendar
 - Back-end: 3 weeks
 - Front-end: 1 week
 - Mobile dev: 1 week
- Possible additional features:
 - *Public event pages with ticketing, attendee lists, communication with attendees:*
6 - 12 weeks
 - *Could just integrate with EventBrite, or Presence or something else*
 - Recurring events
 - *Product: 2 weeks*
 - *Design: 1 week*
 - *Back-end: 2 weeks*
 - *Front-end: 3 weeks*

Bioregional Tools & Mapping - \$75k

We've released the first version of a geographic map to visualize the location of resources, requests, offers, events, members, and communities. There is a lot more we want to do to help people connect with their local bioregions, communities and especially food systems. This includes adding diverse map layers that can be turned on and off, and bioregional based communities for people to connect locally.

REGEN1 Needs: Ability to draw a polygon around a region – name/build a community; add farms/ranches (through onboarding tool), local features/places of interest, events, resources, technical assistance providers, local networks/hubs, etc.

Collective Governance MVP - \$35k

Basic decision-making tools which enable groups to govern themselves by suggesting and voting on proposals, gathering information from polls, and tracking group agreements.

RND needs publicly visible threads about network governance that people can view without signing in. Basic Loomio functions. Governance of Regen Registry, DAO governance...

Also of interest is quadratic voting and intensity voting.

Collective Project Management - \$70k

We currently have basic project functionality that allows team members to discuss the task at hand. We plan to add basic project management functionality with roles, tasks with due dates, Kanban project boards, and assignments.

We may be able to handle much of this with good integration of existing tools.

Features:

- Projects become groups that can be a part of any number of other groups
- Project group types can have a timeframe for the whole project
- Anyone can create a project group type inside of one or more other groups, enabling bottom up and cross group project collaboration
- Add Task post type with due date and assigned people
- Add basic Kanban like project board
- *Product: 2 weeks*
- *Design: 2 weeks*
- *Front-end dev: 8 weeks*
- *Back-end dev: 3 weeks*
- *Mobile: 8 weeks*

Financial Coordination Tools - \$75k

We want to build in the ability for financial transactions to occur within Hylo. This will enable and include many features including, crowdfunding for projects and organizations, and paid group memberships. In the future this will allow for a built in marketplace.

Eventually this could include connection with supply chain purchasing and online marketplace platforms like the Open Food Network.

Improved Content Management - \$50k

- **Resource Library:** Make it easier to organize and find resources shared like links & attachments and search/filter by type like video, audio, and by topic, etc.
- **Wiki & collaborative post editing:** Add scaffolding for evergreen content/pages that can be added and organized by group moderators and members depending on

permissions. This will also require the ability for multiple people to be able to edit posts/pages.

Public website embed - \$12,800

- Requested by Regen1, this would be a public front-end to the community, allowing non-logged-in prospective members to see some of the content and encourage them to join. See Mighty Networks example: <https://farmersfootprint.us>
- *Time estimate: 4 weeks*

Decentralized Ag Data Wallet - \$160k

Decentralizing the architecture of where data is stored and accessed is a top strategic goal for this partnership. We are excited to work together to explore the best solution for this. We believe that hiring a full time dedicated, senior engineer is the best way to achieve this goal.

- **Identity:** We want a single sign-on that allows any user full access to all the interoperable systems that are a part of this ecosystem.
- **Sovereign data storage:** We want a single place where users data will be stored and accessed by the various platforms they permit to see their data.

Please find the workstream notes for the [Ag Data Wallet and Fiduciary roles here](#).

Communication Enhancements - \$90k

We are going to build on the current chat functionality in Hylo by embedding open source tools for audio and video chat. We also want to build in more Slack-like chat room functionality to streamline Hylo as an all-in-one communication platform, allowing everyone to switch out of current corporate silos into an open source, non-profit alternative.

This includes conversation portability using things like Matrix Bridges and APIs with other platforms like Slack.

Improved metrics, data analytics dashboard and reporting - \$30k

Holonic Group Architecture, Round 2 - \$50k

Hylo has a unique network architecture for groups, where groups can be infinitely nested within each other and have any number of parent groups, creating a graph of relationships between groups. Beyond parent-child relationship types, we want to add relationships

between sibling/peer groups that are collaborating/partnering. This will enable us to map all kinds of group organizational/network structures with higher fidelity. We also will add multi-dimensional systems maps that show resource flows, and relationships between groups and members along dimensions like # of shared collaborators, # of collaborations on projects, trust and [social network analysis metrics](#).

AI for Emergent Coordination - TBD

There are many ways we can use AI and machine learning to make all of these tools more powerful. We will likely start with more sophisticated matching of people with each other to ensure that requests are taken care of quickly, offers are utilized, and ideal collaborations are surfaced.

Relationship Mapping

Perhaps in partnership with ODI and Kumu

Related Operational Costs

We also plan to use some of the associated budget for non-dev related staff

Support - \$10k

- Ongoing monthly technical support available to OpenTEAM participants

Communications & Community Onboarding - \$50k

- Coordination & Communications among project partners (OpenTEAM, Regen1, Regen Network)
- Community Management & Onboarding:
 - Hands-on onboarding support for key communities
 - Working with a core group of beta testers
 - 1 year of part-time community management of key OpenTEAM, Regen Network, and Regen1 groups
- Outreach & Marketing:
 - Creating onboarding guides, videos, and other materials
 - Storytelling & media to communicate about the partnership

Authorization

Signed:_____ Date:_____

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