Drawdown Marin: Governance Challenges and Opportunities

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Introduction

In early October of 2017, Marin County California passed a resolution designed to dramatically reduce greenhouse gas emissions across all of its cities, with the goal of a carbon zero county by 2045. Adopted by the County Board of Supervisors, the initiative, now termed Drawdown Marin, seeks to 'draw down' county wide emissions to hit sustainable GHG limits in partnership with Project Drawdown, a global research institution supporting holistic climate solutions. Of that mission, County Supervisor Sears stated in 2018: "As far as we know, we are the first community that is in the process of taking the ideas that are applicable to us from Project Drawdown and trying to make them a reality"[1]. Among those solutions, Drawdown Marin is currently targeting six Focus Areas of impact: renewable energy, transportation, buildings and infrastructure, local food waste, carbon sequestration and climate resilient communities. Drawdown Marin is a community focused, network based initiative, with each Focus Area helmed by Stakeholder Collaboratives (SC's), or coalition groups consisting of community leaders, industry experts, and partnering institutions including financial and academic organizations. Under the overall guidance of an Executive Steering Committee (ESC), each of the Stakeholder Collaboratives are scoped to implement and manage a selected portfolio of projects in each of the six Focus Areas in support of Drawdown Marin's ultimate 2045 goal. The county has already made admirable progress in reducing emissions, with a 25% decrease overall from 2005 to 2017. Overall, Drawdown Marin seeks to go beyond traditional climate action plans, and act as an implementer and steward of tangible projects targeting a zero carbon county by 2045.

For the climate practitioner community, beyond the crucial importance of its overall GHG goal, Drawdown Marin itself presents a possible case study in innovative implementation strategies for local government. The decentralized and networked stakeholder collaboratives, designed to solicit and center a diverse coalition of community members and subject matter experts, offers a potential model for implementation of complex projects in the public sector. In service of this model, Drawdown Marin's success is predicated upon strong governance in the near term, in order to ensure sustained impact in the future. For Drawdown Marin, barriers and solutions to successful governance are complex, given the breadth of the stakeholders involved, and the technical and political challenges to project implementation. However opportunities do exist to both build a lean organization going forward, as well as potentially replicate this model in other jurisdictions.

This report was compiled by Project Climate at the University of California Berkeley in December 2019. Project Climate is an initiative of the Center for Law, Energy and the Environment, focused on identifying climate change solutions with high impact and supporting them to policy and scale. This report addresses the governance aspects of Drawdown Marin, with the goal of:

- Understanding the current governance context of Drawdown Marin
- Identifying barriers and potential solutions to governance
- Offering preliminary recommendations in support of project success

Current Context of Drawdown Marin

Two years into the project, Drawdown Marin has made solid progress in achieving its initial goals. The County has hired one Project Coordinator, whose role is to drive Drawdown Marin's implementation, and liaise between the ESC and SC's. As of this writing, the ESC has recently offered preliminary project endorsement to the first SC project: the Carbon Sequestration Collaboratives Carbon Farming Initiative. Drawdown Marin is also in the process of drafting a near term strategic outline defining its priorities and needs for the next two years. Drawdown Marin is currently organized without any formal legal incorporation. As such, as the project moves forward into the next strategic phase- where the SC projects will be identified, funded, and implemented, the actual governance structure that Drawdown Marin decides to take on will be crucial to project success.

Governance for Drawdown Marin primarily takes the form of three distinct tracts: *structural, financial, and managerial*. While these areas overlap to varying degrees with each other, it is helpful to initially understand the barriers and potential solutions to their success as distinct. In the following section, each tract is introduced, with barriers and potential solutions described.

- *Structural:* the actual legal or internal architecture of Drawdown Marin going forward. For example, JPA, non-profit, public private partnership ext.
- *Financial*: the mechanism of acquiring and deploying long term funding for both Drawdown Marin itself and the projects it manages.
- *Managerial*: the day to day project management tools and strategies needed.

Structural Governance Challenges

Challenges to successful implementation of a governance 'backbone' (the current internal term used) for Drawdown Marin primarily concern legal structure, political feasibility and jurisdictional location. Interviews with stakeholders and background research has indicated that one of the main barriers to governance structure is simply where in the county superstructure to place any ongoing Drawdown organization. As a county level initiative, Drawdown Marin operates at the nexus of at times competing city and departmental interests. Deciding where to locate a potential governance backbone for the project ongoing will need to balance both public and community level interests, existing jurisdictional needs and Drawdown Marin's own goals. Similarly, beyond where to locate a governance structure, what formal governance structure will work best for Drawdown Marin is an open question. Both of these questions are wrapped up in the ongoing political context of Marin County- with an election in March 2020, and the retirement of one of the original resolutions key champions on the Board of Supervisors, any decisions regarding the location and structure will need to be politically sensitive.

Potential Structural Governance Solutions

Drawdown Marin has several options when it comes to structural governance solutions. The current landscape of applicable governance structures available to Drawdown Marin include:

- Joint Powers Authority
- Public-Private Partnership

- Special Districts
- Non-profit
- Community Choice Aggregator model of networked authorities across cities.

While each of these structures has their strengths and weaknesses, there currently exists in Marin County a strong legacy of JPA formation, leading to some measure of stakeholder support for the formation of a new JPA for Drawdown Marin. However, in implementing a JPA, the stakeholders would still need to address questions such as: which kind of JPA (agreement versus agency), and among which public agencies to include in the JPA. For the continued success of Drawdown Marin, in deciding which structure to pursue, it is critical to identify what the fundamental activities of that structure will be. Beyond formalizing governance structure, financial funding and financial deployment take next precedent as an important component of overall governance.

Financial Governance Challenges

Drawdown Marin is a public sector initiative, therefore to some degree it is constrained by available funding from public sources, including available tax revenue. The financial challenge for Drawdown Marin however, is two fold in the sense that Drawdown Marin must choose a structure that not only allows itself as an independent entity to continue to exist, but also to successfully acquire and deploy project funding for the Focus Area solutions. These solutions are currently scheduled to be decided on in Spring/Summer 2020. In terms of raising public funds, Marin County is currently approaching a tax cap for the March 2020 ballot, as such, competition for the available revenue generated will be fierce, presenting a challenge for future financing. However, a ballot initiative is currently being discussed. Additionally, while Marin County is affluent, and home to many high net-worth individuals, efforts to successfully engage them in public financing opportunities has proven difficult. This has led Drawdown Marin to look to other gap financing options like green banks.

Potential Solutions to Financial Governance Challenges

Across the stakeholder interviews conducted for this report, financing was often identified as the most critical element of governance success. Given the need to work across cities, in partnership with diverse stakeholders in the near and long term, any decision on overall governance structure should therefore:

1. Prioritize flexibility of both funding accumulation and dispersal.
2. Include methods for rigorous financial and environmental risk assessment conducted with transparency across stakeholder groups.

Currently, Drawdown Marin is in the process of exploring financing options including a green bank and ballot initiative in March 2020. In seeking to leverage the high net worth individuals located within Marin County, and the County's proximity to innovation hubs like Silicon Valley, an additional option that Drawdown Marin could pursue is impact investment, along with more traditional private fundraising. Incorporating impact investment into a blended finance strategy, where investment structure is dependent on both public and private capital[2], presents an opportunity for Drawdown Marin. Additionally, Drawdown Marin can seek to engage with 'green' or climate bonds, as well as social impact bonds from public or private sources, although the green bond market is limited[8]. Again, determining what governance structure will allow for the easiest incorporation of a blended finance approach is necessary.

Project Management Challenges

Underneath the financial and structural considerations of governance for Drawdown Marin is the day to day project management needs that must be addressed in the near and long term. Currently there does not exist a tool or method for systematic comparison between projects as they come forward from the SC's. This leaves the individual focus area projects, and Drawdown Marin itself exposed to risk, both in terms of financial and environmental impact. It also incurs a large amount of labor and time opportunity costs in evaluation and decision making. Within the wider political context, ensuring a lack of bias in project choice, and utilizing best project management practices, is necessary to avoid as much as possible, any political backlash from project decision making.

Potential Solutions to Project Management Challenges

Within and among the SC's, having some systematic method of comparison between projects as they are brought forward will be instrumental in allowing the ESC to choose, and then monitor these projects successfully. Drawdown Marin has expressed interested in procuring or developing a software solution that would allow for such systematic comparison of projects. Research indicates that existing tools are limited (see appendix), and that developing a new tool would be costly, both in terms of financial and human resource investment needed. However, at baseline, Drawdown Marin can seek to systemize evaluation metrics as soon as possible to ensure that projects are evaluated evenly. In line with the projects mission of community inclusion and equity, developing an evaluation criteria with input from all members of the stakeholder collaboratives and potential community based organizations will be valuable. At minimum, such an evaluation criteria should seek to include and quantify multiple areas of risk- not just financial. Those risk criteria categories can broadly include:

- Political feasibility and political risk
- Financial feasibility and financial risk
- Environmental feasibility and environmental risk
- Short term and long term risk under several different emissions scenarios if possible.

There are existing frameworks that seek to quantify these disparate areas of risk for project evaluation, often referred to as SROI, or sustainable (or social) return on investment calculations. These will be discussed in the recommendations section below.

Recommendations and Conclusion

Given the critical importance of securing long term financing for its diverse portfolio of projects, this report recommends that Drawdown Marin prioritize funding needs in overall governance decision making. That means centering:

1. Funding flexibility in choice of governance structure
2. Political feasibility and 'path of least resistance' in choice of governance structure

While each of the solutions presented in this report offer strengths and weaknesses, designing the most effective governance structure should take into account the existing strengths of Drawdown Marin's approach- namely, its nonlinear and networked collaboratives. Based on the importance of maintaining the integrity of the current Drawdown Marin structure, two potential avenues for governance include:

1. A JPA of Marin cities Public Works (or other relevant) departments with the potential ability to issue social impact bonds and manage blended finance projects.
2. A new special district of the County designed specifically to incorporate the cities in Marin County into one long term climate change mitigation and adaptation structure. An example of this includes the recently launched San Mateo Flood and Sea Level Rise Resiliency District[3].

Consideration of any avenue for future governance structure should strive to be as lean as possible, with the lowest bureaucratic lift to Drawdown Marin implementers, in order to maintain a balance of power across the SC's and minimize internal resources needed within Drawdown Marin itself. Continued formal surveying of all project stakeholders to determine structure preferences is recommended.

Specifically for financial governance, Drawdown Marin has an opportunity to seek blended finance and leverage both its geographic location and own 'story' or brand, in attracting private financial investment. This could take the form of impact investment in Focus Area projects with the greatest opportunity for market rate returns, such as energy, housing, and potentially food systems. On pg 16 of the appendix, please find an initial draft funding strategy that could be utilized for deployment of projects by financing requirements. In seeking to incorporate private finance, this report strongly recommends investing in impact metric development, and partnering or contracting with EarthShiftGlobal[4], an environmental consultancy with extensive expertise in environmental project assessment and stakeholder systems evaluation. This would both allow for the development of project management and comparison tools Drawdown Marin has identified as necessary, as well as build a foundation of assessment metrics and risk analysis that will better position Drawdown Marin to seek private sector investment. Additionally, by leveraging the innovative aspects of Drawdown Marin's own approach- its first mover advantage among Project Drawdown solution implementation, it's community vision, and decentralized networks, there are opportunities for storytelling and branding both in developing ballot initiatives and fundraising.

Since its genesis in 2017, Drawdown Marin has made admirable progress towards its goal of drastically reducing county level GHG emissions and creating a sustainable zero carbon future for the county's citizens. Ensuring the success of the overall project as it moves into the implementation stage will depend on a continued base of internal stakeholder commitment, long term flexible financing, and community support. Successful governance is crucial to achieving these goals. Building capacity for blended finance, centering flexibility and political feasibility in governance structure, and investing in impact measurement and project management are all ways in which Drawdown Marin can continue strengthening its work. Other jurisdictions have the opportunity to learn from Drawdown Marin's networked and nonlinear approach, which presents an innovative strategy for project implementation in the public sector.

Appendix and Further Deliverables:

<u>Overview of Tools for Project Governance for Drawdown Marin</u>

This document was submitted to Drawdown Marin separately on November 15th, 2019

While there are software tools designed for public sector management, these are primarily concentrated in customer response software, or regulation and process streamlining. None of these tools identified were able on face value to incorporate environmental decision planning or risk analysis except for 3Pillars. For the private sector, tools like Oracle Crystal Ball *are* designed to include robust and comprehensive risk analysis and modeling, but these are geared towards financial and business management. Decision Lens and 3Pillars S-RIO are the closest software tools to the need, but require sales support to understand functionality and cost. NPV+, while aligned with the environmental mission, does not appear to be an actual software tool, but an accounting method (to confirm based on conversation with them). Software costs for all of the tools below are opaque, and require demo's and sales contact to understand pricing. Time cost for training is an additional consideration, as many of these tools will require in depth understanding of use. I anticipate this will be based on number of users licenses and number of projects, and that they will be potentially expensive.

Long term, developing and testing a software tool for use on a project like DDM is potentially valuable for other efforts around the country, however, organizational change management, probability and costs are always a barrier to adoption.

Recommendations:

Sales call with DDM leadership and 3Pillars on functionality and cost.

Decide what the budget is for a software tool, both in terms of personnel and finances.

Eliminate the option of self-building a tool if appropriate.

Consider contracting/outsourcing tool via consulting service.

Based on most recent strategic two year plan, consider hiring for tool support.

List of Tools

Oracle for Public Sector:

https://www.oracle.com/industries/public-sector/state-and-local/

PROS: Regulation management and process governance, supports citizen engagement, focused on public sector needs

CONS: Does not encompass the project procurement aspect (although Oracle offers separate services for this), the environmental, or risk analysis/budget analysis

Oracle Crystal Ball:

https://www.oracle.com/applications/crystalball/

PROS: Detailed risk analysis and predictive modeling tool

CONS: Is designed specifically for financial sector, does not cover the governance or environmental aspect

Salesforce for Government:

https://www.salesforce.com/solutions/industries/government/capabilities/

PROS: robust CRM for government functions, similar to Oracle for government. Offers app development. Offers an economic development platform that can: "Recruit, retain and support businesses and local resources. Centralize communications and interactions with the business community and share that information. Use extensive outcomes reporting to track agency performance."

CONS: Does not include the environmental aspect, risk analysis is not transparent and will require direct sales to identify.

Decision Lens

https://www.decisionlens.com/about#:~:targetText=Decision%20Lens%20is%20the%20leader,IT%20and%20performance%2Drelated%20decisions.

PROS: focused heavily on government, with expertise in strategic management for federal and state clients. Focused on in "Planning, Prioritization and Resource Allocation."

CONS: Environmental aspect unclear- would need a demo to understand fully.

NPV+

https://www.footprintnetwork.org/npvplus/

PROS: Only tool focused on environmental costs and impacts of capital projects.

CONS: The project procurement aspect is unclear, is the tool designed just as an accounting tool? Or does it offer the risk analysis and comparative aspects DDM needs?

S-ROI and EarthShift:

https://www.earthshiftglobal.com/software/3Pillars

PROS: best available option based on face value research:“Guides the facilitator through data entry for costs, benefits, and scenarios for rapid modeling and robust analysis
Enables multiple stakeholders or their representatives to comment on costs and scenarios through an easy, online interface. Facilitates online discussion to supplement or replace the need for an in-person workshop. Gives you the ability to include uncertain and intangible costs and benefits, including externalities. Allows you to identify and evaluate potential alternatives to the decision being analyzed. Provides the flexibility to analyze many different types of projects”
CONS: pricing unclear, capability to handle large amounts of projects rapidly unclear.

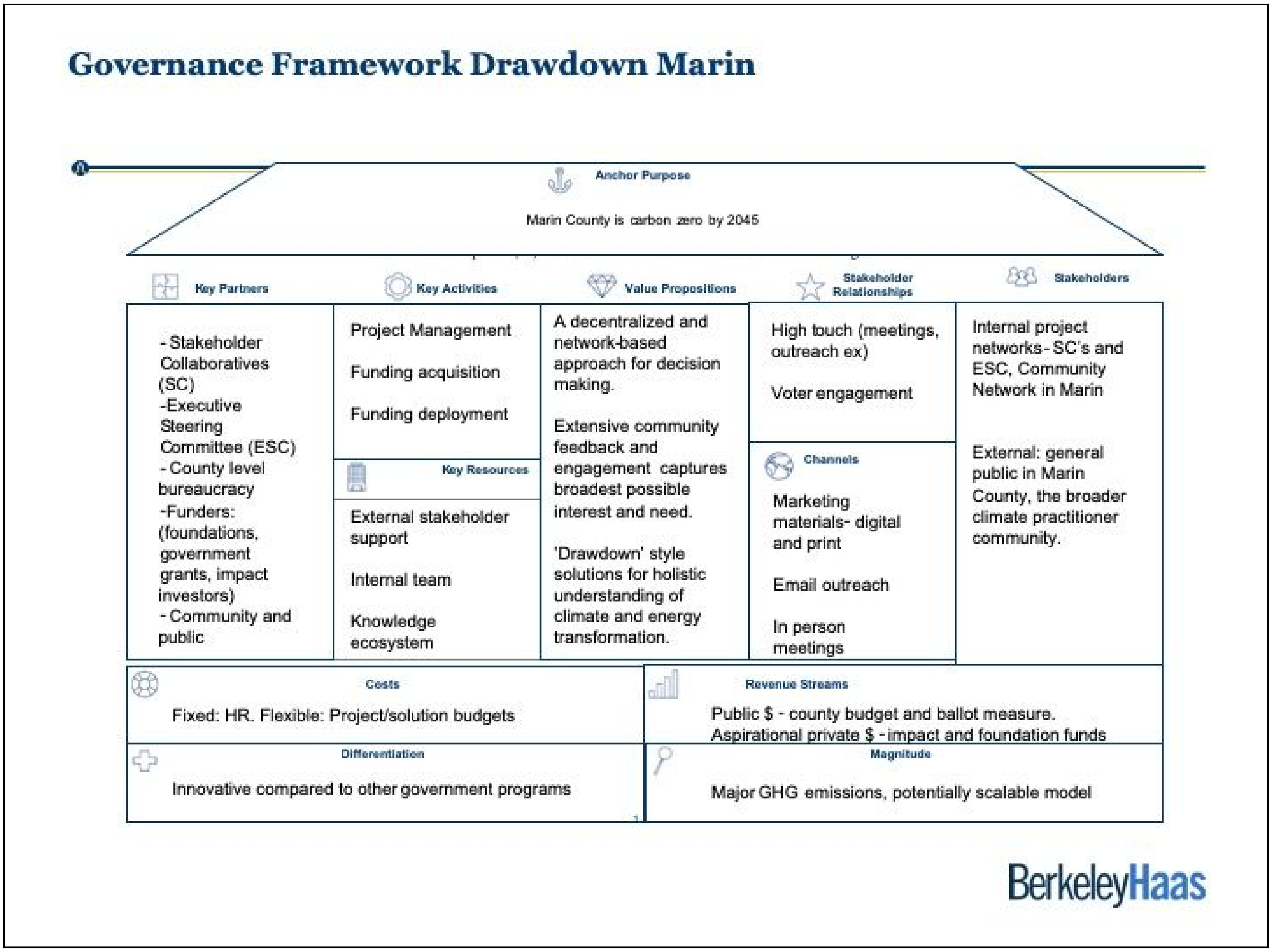
Fig 1: Barriers to Governance Implementation

Captured here in greater detail are more long term components of potential governance challenges facing the overall Drawdown Marin project.

A	B	C
	Barriers to Governance Implementation	
Human	**Structural**	**Funding**
intangibles: leadership potential, team dynamics	legal structure choice: time and resources needed for incorporation, ease of dissolution, legal requirements	thorough financial risk management and analysis
tangibles: staffing requirements appropriate, strong job description's, clearly defined roles	*external communication:* public outreach strategy, wording and project branding	successful method for quantifying environmental impact/SROI
Jurisdicational politics and context	*internal communcations:* SC's and ESC onboard and happy with progress	quantity of funding streams available
Risk perception of overall project and climate change context	*external timing:* legislative cycle	comprehensive and agreed upon metrics for project assessment
Path dependency in decision making	*internal timing:* project monitoring and implementation robust and tested	public perception of public funds used

Fig 2: Governance Impact Canvas

This framework is used primarily for impact startups and business management, however it is useful in understanding the drivers and activities of Drawdown Marin.



Drawdown Marin Potential Funding Strategy

Drawdown Marin has identified immediate funding needs for the categories below.

- *Outreach and marketing*
- *Backbone organization strengthening*
- *Near term project implementation (ideally two full projects)*
- *Project decision making platform development*
- *Training, event and communications for all Drawdown Marin participants.*

Currently all of these categories together represent a minimum funding need of $1,050,000 and a maximum funding need of $16,350,000 (*adapted from the DRAFT version of Drawdown Marin's Strategic Plan). The main source of variation with that broad range is the cost of implementation for the first two projects, which is dependent on currently unknown variables including project inputs, staffing, monitoring, and permitting. Given the dual nature of any financial strategy for Drawdown Marin, namely the need to procure funding to a.) sustain the Drawdown Marin organization itself and b.) secure the funding needed to support each of the projects eventually chosen by the SC's and ESC's, a comprehensive funding strategy should take this differentiation into account.

One of the stakeholder interviews conducted for this report was with Ed Mainland, a long term clean energy professional and advocate in Marin County who was also a primary stakeholder involved in the formation of Marin Clean Energy (MCE) in 2002. He identified that MCE was made possible through the initial strategy of undertaking JPA formation in partnership with a large private funder. In recognition of this, Drawdown Marin could initially seek to replicate that model by launching a campaign in support of JPA formation while seeking private investment upfront, in tandem with a ballot initiative in March of this year. This effort could focus on the initial funding needed for the non-project cost sources, including backbone organization, outreach and communications and project decision making tool development.

Second, Drawdown Marin's broad scope of projects that range from energy and infrastructure, to communities and food waste, will probably necessitate different funding strategies for different project types. In service of this knowledge, and given the variation in financing projections mentioned above, which is primarily dependent on project implementation cost, an initial funding strategy should identify and capture variation in project type. Project financing by revenue stream could be scoped and deployed based on their individual requirements, including the amount of funding available, and financing timeline cycle. For instance, Focus Area projects in Transportation, which might function best with public private partnership financing, can have a long lifecycle to procure funds and build infrastructure. Therefore in the short term, prioritizing projects that are amenable to private sector financing or impact investment, which can have a life-cycle of 3-6 months, will allow for more strategic deployment of capital. The table below includes an outline of what identifying type of project by funding/financing source and timeline could look like. This table is not meant to be comprehensive, but instead serve as an example of what considerations a funding strategy for Drawdown Marin's projects could take into account.

Project Type/Focus Area: potential funding and funding lifecycle

Project Type	Type of Funding Available	Time to Aquire Funding from Proposal to Close
Renewable Energy	- private philanthrophy - ballot measure - grant funding through foundations and government - impact investment	impact investment- 3-6 months depending on investment type and company/project ballot measure- > 6 months depending on legislative cycle grant funding through foundations and government - 6 months to 2 years private philanthrophy- 3-6 months
Transportation	- public private partnerships - private philanthrophy - ballot measure	ballot measure- > 6 months depending on legislative cycle public private partnerships- long term, multi-year private philanthropy- 3-6 months
Buildings and Infrastructure	- public private partnership - private philanthrophy - ballot measure - impact investment	impact investment- 3-6 months depending on investment type and company/project ballot measure- > 6 months depending on legislative cycle public private partnerships- long term, multi-year private philanthropy- 3-6 months
Local Food and Food Waste	- private philanthrophy - ballot measure - grant funding through foundations and government - impact investment	private philanthropy- 3-6 months grant funding through foundations and government - 6 months to 2 years ballot measure- > 6 months depending on legislative cycle impact investment- 3-6 months depending on investment type and company/project
Carbon Sequestion	- impact investment - private philanthrophy - university level grants/ag extension	impact investment- 3-6 months depending on investment type and company/project private philanthropy- 3-6 months
Climate Resilient Communities	- grant funding through government and foundations - ballot measure - private philanthrophy	private philanthrophy- 3-6 months ballot measure- > 6 depending on legislative cycle grant funding through foundations and government - 6 months to 2 years

In sum, an initial funding strategy for Drawdown Marin in support of the in-progress strategic plan could look like:

Year One:

- *Funding Procurement Activities*: Public funding, JPA formation and limited private philanthropic investment for Drawdown Backbone Organization.

- *Funding Deployment Activities:* Invest in project tool such as EarthShiftGlobal, assessment metrics, and focus development (fundraising). Undertake financing assessment based on Focus Area project type, financing available and acquisition and deployment timeline.

Year Two:

- *Funding Procurement Activities*: Ongoing project development funding. Utilize project procurement tool to develop a project deployment strategy based on financing requirements and risk assessment in support of two initial project implementation plans.

- *Funding Deployment Activities:* Implement and monitor two initial projects.

Sources:

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