



Equity Guide for Green Stormwater Infrastructure Practitioners

Because green infrastructure can be a powerful lever for advancing equity.

CALUMET STORMWATER COLLABORATIVE



GUIDE AT A GLANCE

Who developed the Guide?



Project Lead



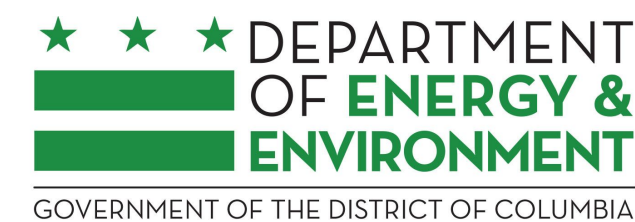
Lead Author



Contributors



Project Team + Reviewers



Focus Groups

PUBLIC SECTOR / CONSULTANTS

Atlanta Watershed Management Department
Baltimore Department of Public Works
City of Vancouver
Jacobs Engineering Group
King County
Metropolitan Planning Council
Metropolitan St. Louis Sewer District
Philadelphia Water Department
Seattle Public Utilities
The Nature Conservancy
Washington DC Department of Energy and Environment.

COMMUNITY-BASED ORGANIZATIONS

Baltimore: American Communities Trust, Watershed Partnership of Baltimore
Chicago: Center for Neighborhood Technology, James Patchett, Thomas Price
Milwaukee: Milwaukee Water Works, Milwaukee Water Commons
Seattle: Environmental Coalition of South Seattle
Tucson: Primavera Foundation, Tucson Water Rebate Program
Vancouver, BC: Still Moon Arts, False Creek Watershed, West Coast Environmental Law, Simon Fraser University

GUIDE AT A GLANCE

What is the Guide?



The ***Equity Guide for Green Stormwater Infrastructure Practitioners*** is an action and evaluation roadmap that defines the GSI industry's shared long-term equity goals with:

- Sample metrics that help track progress toward those goals over time,
- Best practices that will ultimately move the needle, and
- Tools to support individual practitioners in customizing community-informed equity work plans, equity impact metrics, and evaluation plans to local contexts.

Ground ourselves in research

Lean into a shared language

Cohere concrete goals

Turn insight into action

Measure impact consistently

GUIDE AT A GLANCE

Is the Guide for me?



ORGANIZATION

I work for a local public sector stormwater management organizations such as a:

- city
- utility
- agency

ROLE

My team manages green infrastructure programs.

SCOPE

My team leads green infrastructure programs inclusive of:

- policies
- practices
- initiatives

GUIDE AT A GLANCE

Get grounded in research



The Literature Review grounds the Guide in peer-reviewed research, published stormwater plans and reporting documents, and lived experiences of practitioners and stakeholders.

80

Published sources, spanning peer-reviewed literature and published plans and tools produced by practitioners and national organizations reviewed.

64

Individuals interviewed across 10 teams of practitioners and 11 clusters of community leaders in Seattle/King County, Chicago, Baltimore, Tucson, Milwaukee, Atlanta, Vancouver, DC, Buffalo, St. Louis, San Francisco, and Philadelphia.

75

Page *Literature Review and Community Interview* summary boiling down insights and acting as the foundation for the Equity Guide.

GUIDE AT A GLANCE

Top 10 Centering Community Insights



1. We recognize that “Checking the box” is no longer going to cut it.

2. We’re preparing ourselves that trust-building will take time.

3. We’re anchoring collaboration on shared values.

4. We understand we may need new tools and training to meet evolving best practices.

5. We’re forging decision-making partnerships.

6. We’re meeting community where they are.

7. We’re redefining “expert” status with co-education.

8. We’re compensating stakeholders and avoiding burnout.

9. We’re measuring success in new ways.

10. We’re thinking differently about our budgets.

GUIDE AT A GLANCE

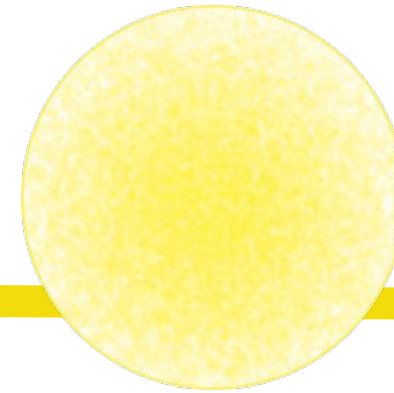
Lean into a shared language



How Green Infrastructure can Advance Equity

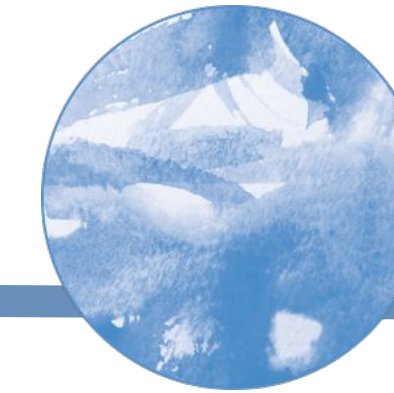
The Guide kicks off with critical context about our shared opportunity to drive equity by:

- Expanding nature in communities
- Increasing climate resilience
- Improving properties
- Investing in economic stability
- Creating spaces that facilitate community cohesion
- Increasing community participation and power
- Building trust and acknowledging past harms



The Roles We Play in Advancing Equity

- Internal Advocates: Leaders and workers within the public sector stormwater management organization.
- Implementation Teams: GSI implementation teams.
- External Stakeholders: Broad and inclusive set of stakeholders to maximize community benefits.



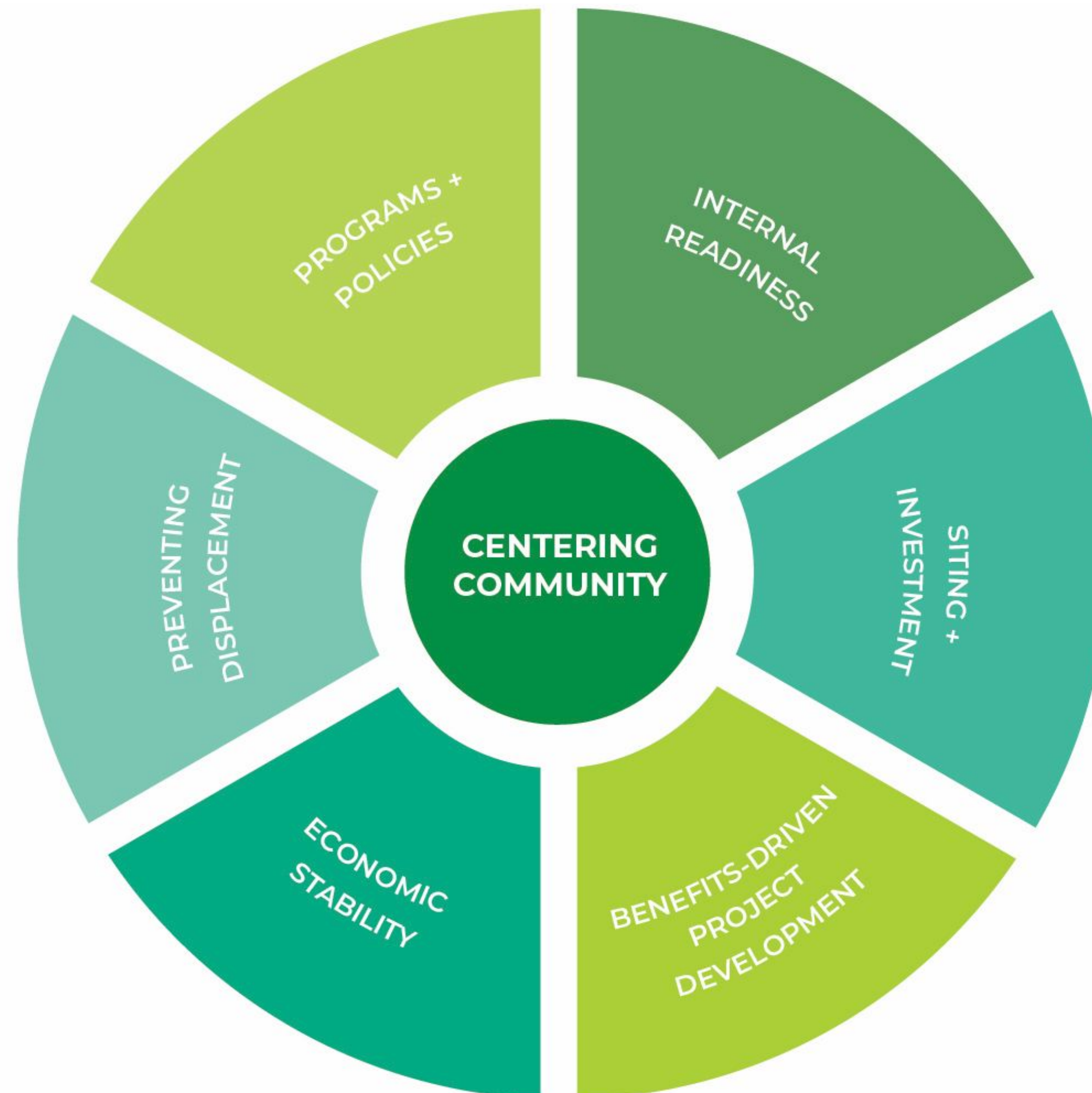
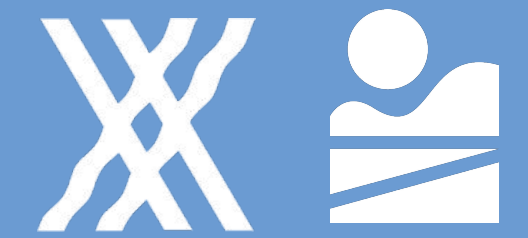
Definitions to Foster a Shared Language

Throughout the Guide and in the appendix are definitions for terms for the industry to align around. Examples of defined terms include:

- Green stormwater infrastructure
- Equity (several definitions provided)
- Spatial Equity
- Identity Equity
- Process Equity
- Power Equity

GUIDE AT A GLANCE

Understand the seven equity goals





INTERNAL READINESS

Our team understands equity and we are committed and equipped to advance it through our work.



SITING + INVESTMENT

Our project selection approach and investment levels proactively consider potential to advance equity.



BENEFITS-DRIVEN PROJECT DEVELOPMENT

Our green infrastructure projects are designed, constructed, and maintained to provide lasting community benefit.



ECONOMIC STABILITY

Our green infrastructure procurement, employment, and workforce development practices build economic stability and wealth for underinvested communities.



Rain Gardens at Work

What is a Rain Garden?

Today, the formerly vacant land around you is home to four large rain gardens. A rain garden is a planted depression that allows rainwater runoff from impervious urban areas to be absorbed. Their shape, porous soil, and hardy native plants allow these engineered gardens to collect, slow, filter, and absorb rain.



Why Rain Gardens?

In nature, rain slowly soaks into the ground, but as people developed this area, roofs and pavements blocked the natural absorption of water. With nowhere to go, stormwater becomes runoff, picking up pollutants like car oil and pet waste. During larger rainfalls, stormwater can flood our city and pollute our waterways. Rain gardens are a natural, safe way to mimic nature's original water management system.

Benefits of Rain Gardens

- Reduces localized flooding
- Filters pollutants out of water
- Reduces stormwater
- Improves water quality
- Provides habitat

PREVENTING DISPLACEMENT

Displacement risk is proactively addressed in all of our green infrastructure programs, policies, and projects.



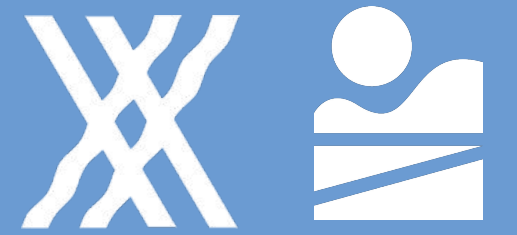
PROGRAMS + POLICIES

Our green infrastructure policies and program design, management, and reporting structures proactively elevate and drive transparency around equity.



CENTERING COMMUNITY

Community members are essential partners and participants in all green infrastructure planning and development.



Inequity has arisen from exclusion of specific communities in decision-making. The act of inclusion on its own moves us in the direction of equity.

Community members who are experiencing (or have historically experienced) inequity are the foremost experts on what needs to change so we can deliver solutions that best meet their needs.

CENTERING COMMUNITY BEST PRACTICES



1. Show up and listen

BEST PRACTICES

- Be present in communities without asking for anything and listen.
- Make space for owning past harms.

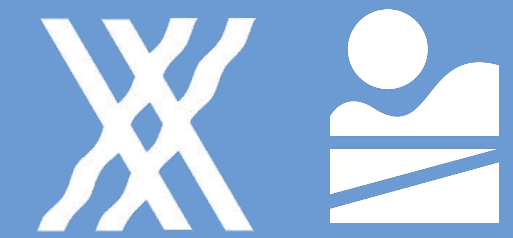


NEAR-TERM OUTPUTS

- ❑ We've started tracking the **number of meaningful green infrastructure staff engagements** with the community that were dedicated to simply being present and listening.
- ❑ Our team has received any training needed to be able to make space for owning past harms.

CENTERING COMMUNITY BEST PRACTICES

2. Shore up our engagement standards



BEST PRACTICES

- Surface historical input.
- Validate and update historical input with fresh engagement.
- **Compensate and credit community stakeholders for their time and expertise.**
- Ensure those engaged are demographically representative of the service area.
- Accommodate the engagement needs of marginalized groups.
- Strive to create accessible, relevant, and engaging meeting content and agency deliverables.

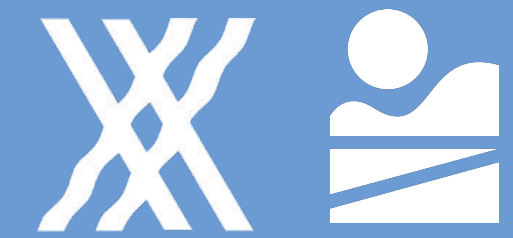


NEAR-TERM OUTPUTS

- ❑ A community collaboration strategy covering program, policy, and project development has been integrated into existing plans, with input and buy-in from our staff and community members, and is regularly updated with refreshed input from representative community voices for each focus geography.
- ❑ The community collaboration strategy is being implemented according to schedule and regularly refreshed.
- ❑ **The percent of program budget allocated to community engagement is sufficient to support the community collaboration strategy and to resource community members for their partnership roles.**
- ❑ The percent of staff or resourced community leadership time that is dedicated to community engagement is sufficient to support the community collaboration strategy.

CENTERING COMMUNITY BEST PRACTICES

3. Engage from the start



BEST PRACTICES

- Engage community stakeholders as essential partners in the **upfront planning, budgeting, and design** of program plans, policies, and projects as possible.
- Empower stakeholders with knowledge they need to fully participate at the outset.



NEAR-TERM OUTPUTS

- ❑ We are tracking the percent and total number of community stakeholders engaged **who represent impacted and underrepresented groups.**
- ❑ We are tracking the percent of stakeholders, disaggregated by race and other prioritized equity factors, who **report that they were meaningfully engaged in the creation of the plans, policies, and projects** and that their priorities were reflected in the final product (or they understood why they weren't).
- ❑ We are tracking the percent of project, program, policy processes for which the majority of stakeholders, across all race and other prioritized equity factors, **report that they were meaningfully engaged as essential partners and participants.**
- ❑ Community-centered green infrastructure plans and policies are completed, published, and made accessible to stakeholders.

CENTERING COMMUNITY BEST PRACTICES

4. Engage for the duration



BEST PRACTICES

- Engage community stakeholders as essential and informed partners **throughout each program and project lifecycle.**
- Build trust and manage change through consistent engagement and communication.
- **Build capacity for stakeholders to engage more effectively over time.**
- Give public credit to stakeholders for the value they contribute.

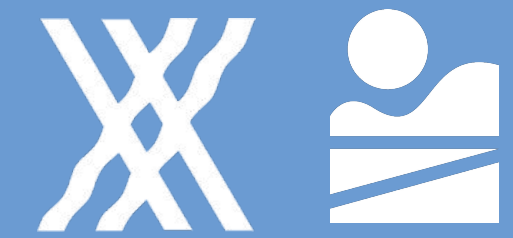


NEAR-TERM OUTPUTS

- ❑ Full-lifecycle community engagement plans are written for our programs and projects, with input and buy-in from our staff and community members, and are implemented and adapted as needed.
- ❑ Our plans specify the ideal composition and prioritization of stakeholders to be demographically representative of the population served.
- ❑ **Our plans specify capacity-building needs, actions, and output measures needed to support stakeholders to engage effectively.**
- ❑ We are tracking the percent of stakeholders who report they were satisfied with the methods, frequency, and quality of engagement for each program or project.
- ❑ The total dollar value and percent of community engagement program and project budget invested in community-based organizations, businesses, and individual community members from the impacted community is increasing.

CENTERING COMMUNITY METRICS

Midterm metrics and data collection guidance



SUGGESTED METRIC

Cumulative trends from data collected for ‘near-term outputs’ show improvement in community engagement, especially for highly impacted and disadvantaged populations.

Percent of stakeholders who report that our green infrastructure programs, policies, and projects **reflect community priorities** to the extent feasible.*

Percent of stakeholders who **believe our organization values community participation and engagement**.*

Percent of stakeholders who report they have a **trusting relationship** with us.*

DATA COLLECTION GUIDANCE

Survey | mix of staff and participant surveys. Pull data into visual dashboards that show trends over time.

Survey | Ask stakeholders “To what extent does [insert initiative] **reflect your priorities?**” following the roll-out.

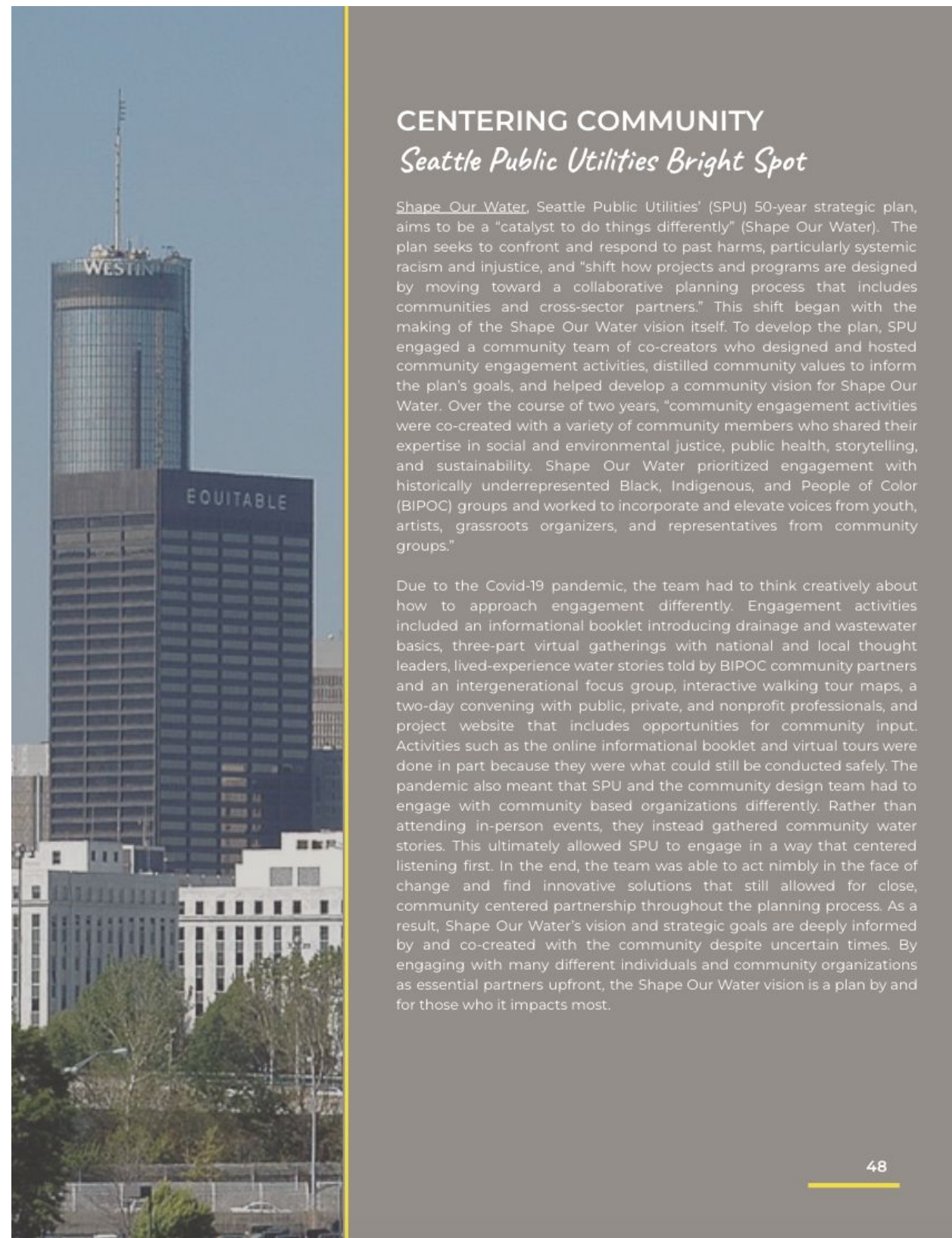
Survey | Ask stakeholders “To what extent **do you feel your participation was valued** in [insert initiative]” following the roll-out.

Survey | Ask this question on an annual survey of all community members impacted by our green infrastructure initiatives.

***Always disaggregate data by race and other prioritized equity factors**

CENTERING COMMUNITY

Bright Spots



Shape Our Water 50 Year Strategic Plan



- SPU engaged a community team of co-creators who:
 - designed and hosted community engagement activities
 - distilled community values to inform the plan's goals
 - helped develop a community vision
- Over the course of two years community members shared their expertise in social and environmental justice, public health, storytelling, and sustainability.
- SPU prioritized engagement with historically underrepresented Black, Indigenous, and People of Color (BIPOC) groups
- SPU incorporated and elevated voices from youth, artists, grassroots organizers, and representatives from community groups.

GUIDE AT A GLANCE

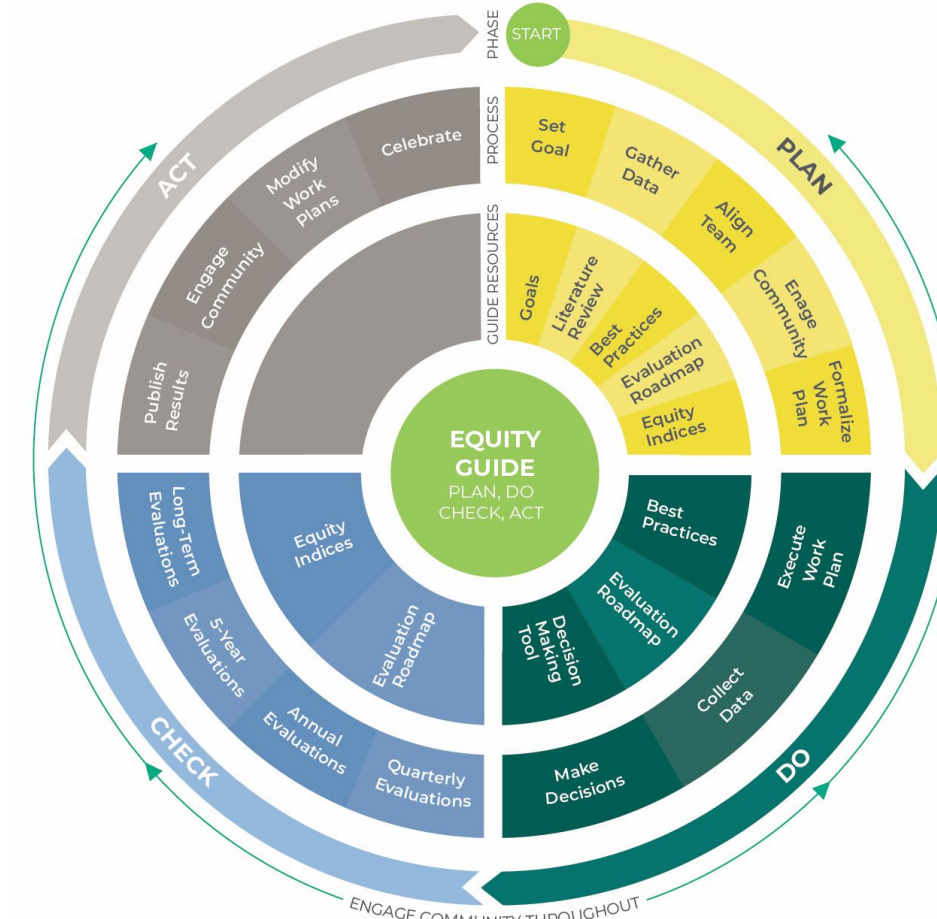
Turn insight into action



Equity Guide Goals Self-Assessment					
Goal	Lead	Priority Level	Need	Completion	
Goal: Our team understands equity and we are committed and equipped to advance it through our work.	Dept or Staff Responsible	Low, Medium, High (or Not Feasible)	Low, Medium, High (or Not Feasible)	0%	25% 50% 75% 100%
Best Practice #1 - Articulate commitment: Encourage leadership to articulate and model a clear commitment to supporting the team's internal work to understand and develop capabilities and	Leadership team (LT)	High	High		
Action 1: Create an internal readiness	LT	High	High		
Action 2: Conduct an internal readiness	HR	High	High		
Action 3: Invest in training needs identified		Not Feasible	Not Feasible		
Best Practice #2 - Create safe spaces for honest dialogue: Create safe spaces for our team members to learn about equity and dialogue honestly about it conceptually, professionally, and personally, and encourage	GI Team, LT for broad adoption	Medium	Medium		
Action 1: Research, create, and adopt a 'safe	GI Team	High	High		
Action 2: Research, create, and adopt an		Not Feasible	Not Feasible		
Best Practice #3 - Create an action plan: Facilitate a collective internal process to assess past performance related to equity for our program and create and adopt a shared	GI Program Manager (PM)	Low	Low		
Action 1: Reflect on organizational barriers	GI PM	Low	Low		
Action 2: Develop and execute solutions to	GI PM	Low	Low		
Action 3: Using the survey and a facilitated process, create and execute an action plan	GI PM	Low	Low		
Action 4: Create staff KPIs that correspond	GI PM	Low	Low		
Action 5: Prepare a communications plan for		Not Feasible	Not Feasible		
Action 6: Provide quarterly survey-based and		Not Feasible	Not Feasible		
Best Practice #4 - Support the creation		Not Feasible	Not Feasible		
Action 1: Catalog and identify trends in		Not Feasible	Not Feasible		
Action 2: Create and implement a DEI plan		Not Feasible	Not Feasible		

CHOOSING GOALS SELF-ASSESSMENT

(Downloadable .xls)



CHARTING A COURSE

APPENDIX G Decision-Making Checklist for Organizational Leaders	
Internal Readiness	<ul style="list-style-type: none"> What training, resource, or time/budgetary allowance have I provided to my team to help them achieve their equity goals?
Centering Community	<ul style="list-style-type: none"> Has my team established a community engagement plan that reflects input from community stakeholders? Are we holding ourselves accountable to execute the plan? Does my team have a sufficient community engagement budget and time allocation? Has my team engaged community stakeholders as essential partners in the upfront planning for the program or project? Have I provided the resources and support needed to engage community throughout the full lifecycle?
Siting and Investment	<ul style="list-style-type: none"> Are we measuring and holding ourselves accountable to engage the community in siting decisions/prioritization? Does my team have a clear and consistent method to evaluate the potential equity gains and have those been used to evaluate the site and resource the project/program?
Benefits-Driven Project Development	<ul style="list-style-type: none"> Does my team have a clear and consistent method for ensuring community co-designed the green infrastructure? Is my team held accountable to apply technical/design standards that advance equity? Are these standards kept up to date based on our advancing understanding of how to enhance equity? Does my team report that the construction plan and budget are going to be able to deliver on the community priorities? Does my team feel safe to ask for more resources when needed to complete a project equitably? Does my team have a clear and consistent method for ensuring maintenance is appropriately resourced to ensure the BMP remains an equitable asset?

DECISION-MAKING CHECKLISTS

GUIDE TOOLS

Choosing Goals Self-Assessment



	Lead	Priority Level	Need	Completion				
	Dept or Staff Responsible	Low, Medium, High (or Not Feasible)	Low, Medium, High (or Not Feasible)	0%	25%	50%	75%	100%
Goal: Our team understands equity and we are committed and equipped to advance it through our work.								
Best Practice #1 - Articulate commitment: Encourage leadership to articulate and model a clear commitment to supporting the team's internal work to understand and develop capabilities and commitments for advancing equity. In consultation with department heads and program managers, human resources or other appropriate department(s) should assess the need for and invest in training that supports our team in gaining critical but challenging equity practitioner skills.	Leadership team (LT)	High	High					
Action 1: Create an internal readiness commitment statement.	LT	High	High					
Action 2: Conduct an internal readiness survey.	HR	High	High					
Action 3: Invest in training needs identified through the survey and endorsed in the action plan (see Best Practice #3).		Not Feasible	Not Feasible					

Resources include:

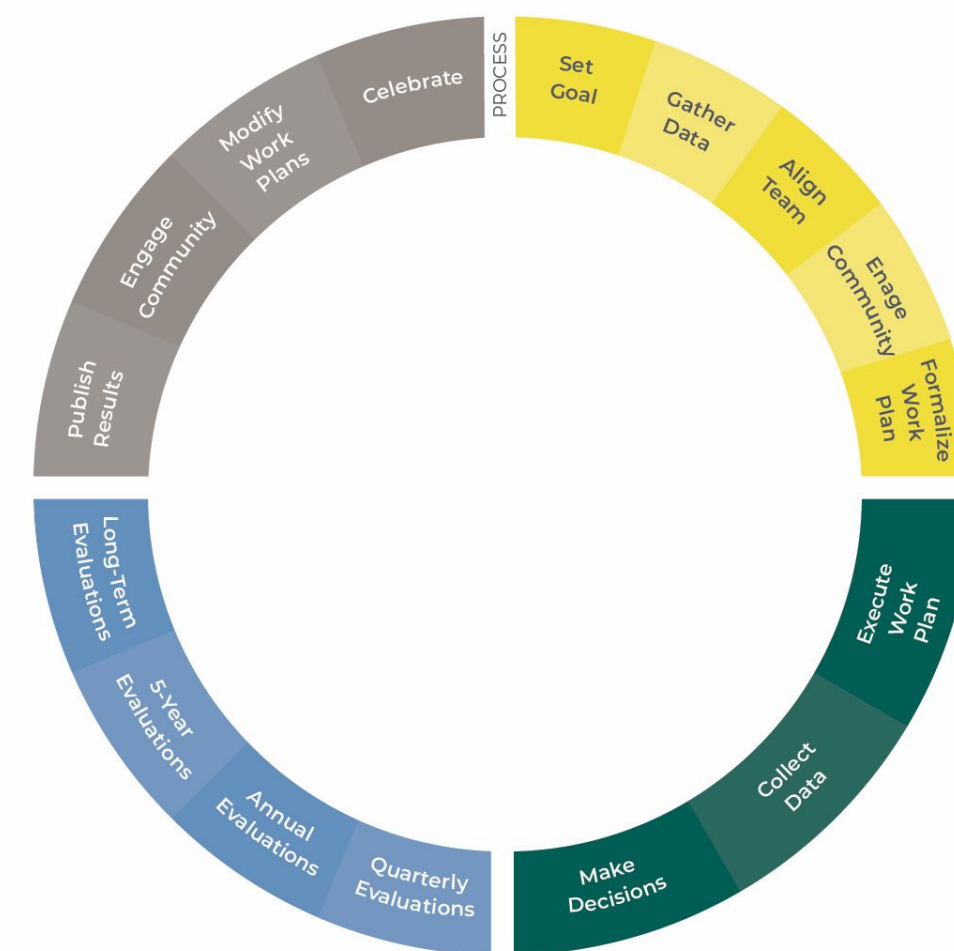
- Downloadable open-source spreadsheet
- Detailed instructions for:
 - Calibrating tool
 - Assessing actions
 - Assessing best practices
- Team workshop support
 - Workshop preparation
 - Workshop facilitation guide
 - Sample agenda

GUIDE TOOLS

Charting a course



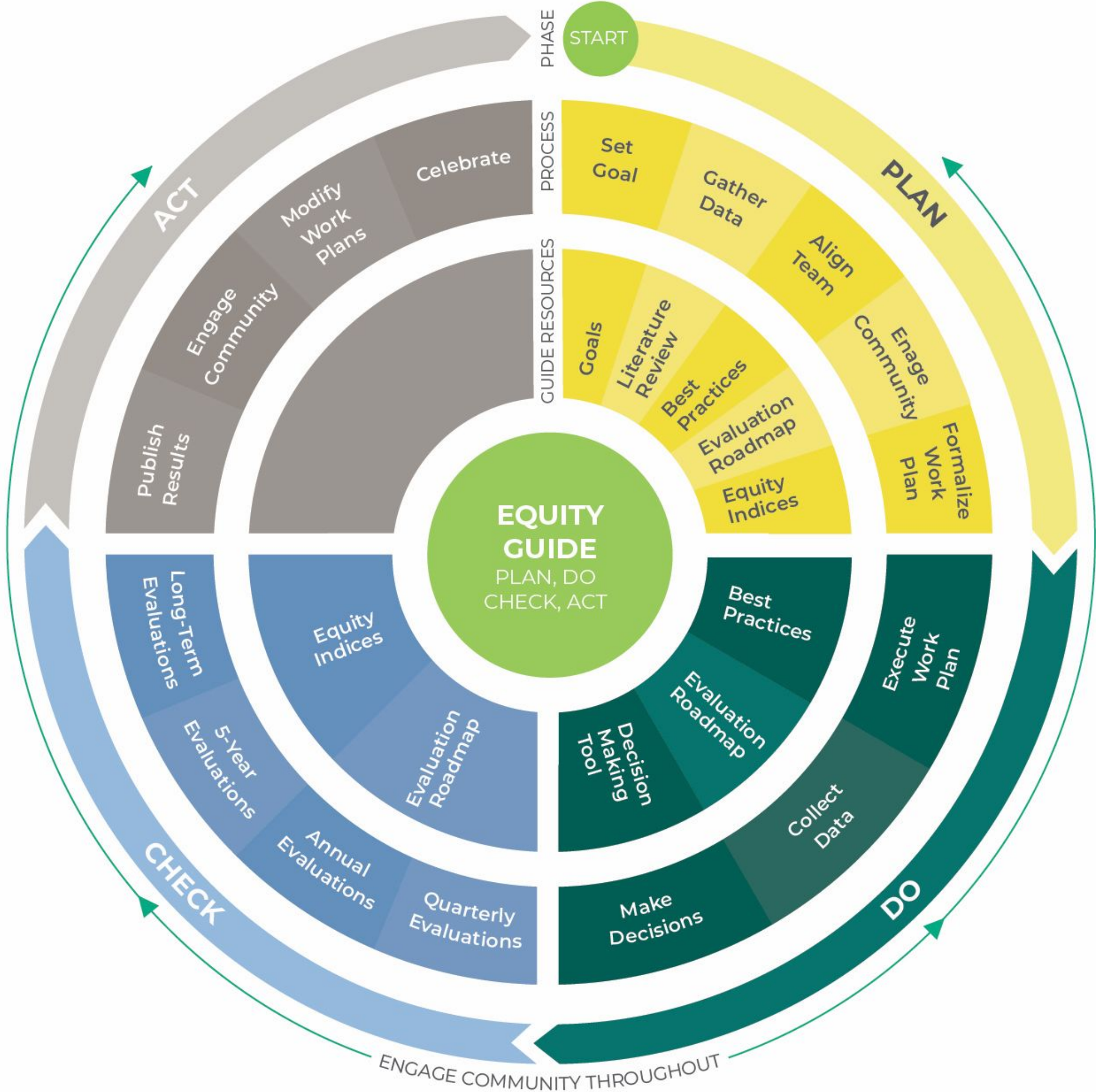
Phases: Plan, Do, Check, Act



Recommended Process
Translate Guide Insights and Resources into your individual plan



Resources
Understand the Guide resources that support your journey



GUIDE TOOLS

Charting a course



CENTERING COMMUNITY WORKBOOK
PLAN PHASE / Introduction



Launch the “Plan” phase leading up to the next annual green infrastructure program strategic planning and budgeting cycle. Begin by affirming readiness to take on the Centering Community goal, gathering data, aligning the team, and engaging community.

Gather Guide Resources





Review the Process



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CENTERING COMMUNITY WORKBOOK
PLAN / Process

RECOMMENDED PROCESS

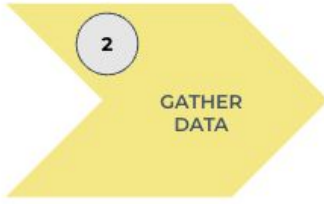
- Review the 'Centering Communities' tab of the [Excel-based 'Choosing Goals Self-Assessment'](#) to begin to assess our department's readiness and capabilities to advance Centering Community goal.
- Engage community stakeholders in the process of assessing the importance of prioritizing measurable progress toward the Centering Community goal.
 - Stakeholders we will engage, and specific community groups and/or community leaders we could partner with to engage the community.
 - Process for engaging stakeholders:
- Engage other agencies, departments, and review long term plans to seek areas of alignment around the Centering Community goal.
 - Other agencies and departments we will engage:
 - Process for engaging other agencies and departments:
 - Long-term plans we will review:
 - Process for reviewing and assessing alignment from long-range plans:

OUTCOME


Using the community input, broader jurisdictional plans, and an internal assessment of capabilities, affirm the choice to prioritize the Centering Community goal and facilitate an internal alignment process.

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CENTERING COMMUNITY WORKBOOK
PLAN / Process



RESOURCES



RECOMMENDED PROCESS

- First, complete a detailed review of the Centering Community content in the Literature Review and Equity Guide.
- Once our core team has a full understanding of the scope and details of the Centering Community content, ask ourselves what's already being done, what resources are needed, what's feasible, and what will have biggest impact. Consider using the 'Centering Community' tab of the ['Choosing Goals Self-Assessment' Excel-based spreadsheet](#) to complete this detailed assessment.
- Also take some time now to complete a high-level assessment of how our team will approach data collection to track performance against these suggested metrics.
 - First, review the Centering Community Near Term Outputs in the Guide. Highlight any our team could realistically begin collecting data for in the coming year.
 - Next, review the Centering Community Suggested Metrics and Data Collection Guidance in the Guide. Highlight any our team could realistically begin collecting data for in the coming year. Jot down some initial notes about how our team could begin collecting the data.
- Ensure our team has a strong working knowledge of the diversity of communities within our jurisdiction, as well as the current and/or past inequities they face. Consult national (The National Equity Atlas) or local equity indices for baseline data about our jurisdiction.

OUTCOMES

We have a strong working knowledge of the Centering Community best practices, evaluation recommendations and have taken stock of how our current department's practices, resources, and capabilities relate.

We have looked at data related to 'Centering Community' for our community using The National Equity Atlas or other local sources.

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GUIDE TOOLS

Decision-making checklists



APPENDIX F

Decision-Making Checklist for Program Managers



Internal Readiness

- Is there any specific training, or resource, or time/budgetary allowance that will help me achieve my equity goals? If so, discuss this with management.

Centering Community

- Am I following a community engagement plan that reflects input from community stakeholders?
- Is my community engagement budget and time allocation sufficient?
- Have I engaged community stakeholders as essential partners in the upfront planning for the program or project?
- Do I have the resources and support to engage community throughout the full lifecycle?

Siting and Investment

- Was the community engaged in siting decisions/prioritization?
- Do I understand the potential equity gains and have those been used to evaluate the site and resource the project/program?

Benefits-Driven Project Development

- Has community co-designed the green infrastructure?
- Have I followed technical/design standards that advance equity?
- Is the construction plan and budget going to be able to deliver on the community priorities?
- Is the maintenance appropriately resourced to ensure the BMP remains an equitable asset?

Economic Stability

- Have I maximized opportunities for local/SWMBE firms who can realistically build wealth in the community served to provide any contracted services?
- What workforce development activities could be integrated into the program/project?

Preventing Displacement

- Is there real or perceived displacement risk for the project/program?
- Have I engaged a displacement expert to help me understand the risks and potential mitigation strategies? Have I asked them to participate in a community dialogue?
- Have I engaged the community in a dialogue about displacement risk mitigation strategies?
- Have I developed a displacement prevention plan for the project/program?

Programs and Policy

- Can the community easily access information about the equity efforts and outcomes of our policies and programs?

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APPENDIX G

Decision-Making Checklist for Organizational Leaders



Internal Readiness

- What training, resource, or time/budgetary allowance have I provided to my team to help them achieve their equity goals?

Centering Community

- Has my team established a community engagement plan that reflects input from community stakeholders? Are we holding ourselves accountable to execute the plan?
- Does my team have a sufficient community engagement budget and time allocation?
- Has my team engaged community stakeholders as essential partners in the upfront planning for the program or project?
- Have I provided the resources and support needed to engage community throughout the full lifecycle?

Siting and Investment

- Are we measuring and holding ourselves accountable to engage the community in siting decisions/prioritization?
- Does my team have a clear and consistent method to evaluate the potential equity gains and have those been used to evaluate the site and resource the project/program?

Benefits-Driven Project Development

- Does my team have a clear and consistent method for ensuring community co-designed the green infrastructure?
- Is my team held accountable to apply technical/design standards that advance equity? Are these standards kept up to date based on our advancing understanding of how to enhance equity?
- Does my team report that the construction plan and budget are going to be able to deliver on the community priorities? Does my team feel safe to ask for more resources when needed to complete a project equitably?
- Does my team have a clear and consistent method for ensuring maintenance is appropriately resourced to ensure the BMP remains an equitable asset?

Economic Stability

- Does my team have a clear and consistent method for prioritizing opportunities for local/SWMBE firms (who can realistically build wealth in the community served) to provide any contracted services?
- What workforce development activities could be integrated into the program/project?

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GUIDE AT A GLANCE

Measure impact consistently

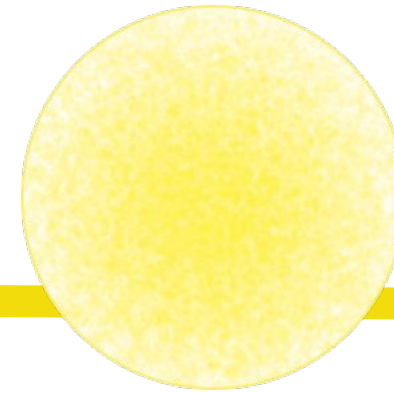


How to Approach Evaluation

This section prepares program managers to get the most out of their evaluation efforts. Example guidance includes:

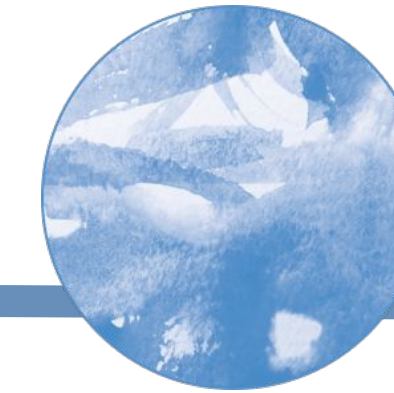
- Use the suggested metrics to catalyze conversations that clarify goals.
- Bring communities along to help prioritize and refine the goals, strategies, and metrics that matter most.
- It's better to have a little data that you will use than a lot of data that you won't.
- Gathering data is hard. Develop a feasible plan upfront.

<https://bit.ly/GSIEquityGuide>



Metrics Spreadsheet

All proposed metrics presented throughout the Evaluation Roadmaps are collected into an Excel-based spreadsheet laid out as a logic model.



Retrospective Project Assessment

This resource helps teams learn from past projects with the following resources:

- A sample community stakeholder pre-survey to collect community input uses recommended metrics from throughout the Guide
- Discussion pre-work recommendations to prepare the team
- Equity assessment discussion guidance to prepare for a productive session
- Discussion facilitation guide workbooks to fill out
- Post-discussion guided reflection to elevate key takeaways to inform growth



DISCUSSION

How does the Guide apply to your work as a stormwater practitioner?
What steps can you take to advance equity in your role?

THANK YOU

Let's keep talking!



the **green** infrastructure
leadership exchange

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