

NATURE

BASED SOLUTIONS

LA COUNTY
WATER PLAN
TASK FORCE

NbS Task Force Introductions

Please share in the chat:

- **Your name, pronouns**
- **Affiliation**
- **Ice Breaker – Favorite Winter/Holiday Tradition**

NbS Task Force Meeting 3 Agenda

Goals for Today

- Provide update on Definition and Standard, IUCN Framework Resources
- Receive TF Feedback + Expertise

Agenda

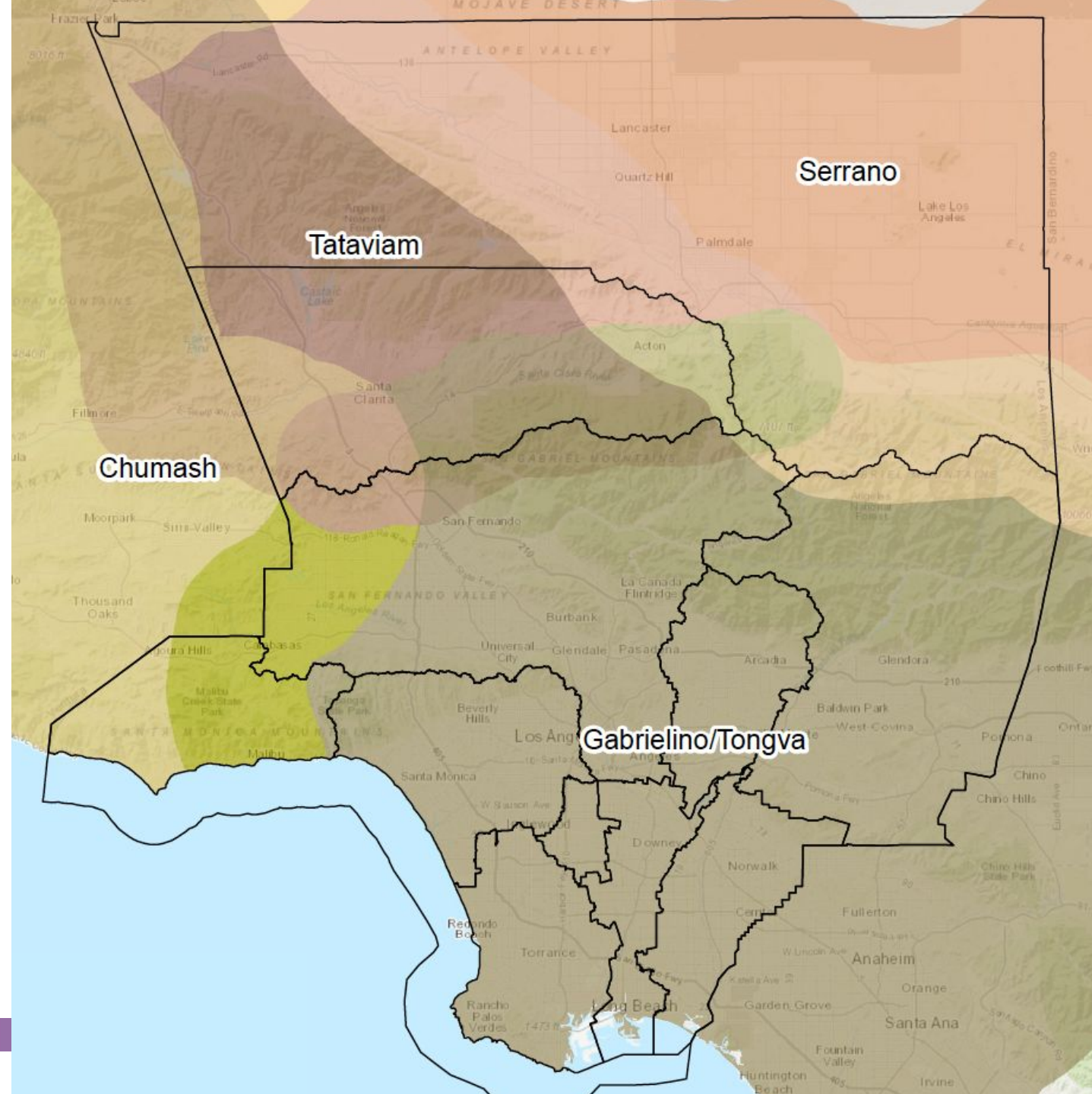
- Welcome, Introductions, Reminder of Goals | 10:00 – 10:10 a.m.
- NbS Task Force: The Path Forward | 10:10 – 10:15 a.m.
- Updates on the Definition and Standard from BRP + Exercise | 10:15 – 10:45 a.m.
- Wrap up and Next Steps | 10:45 – 10:50 a.m.

Acknowledgement of Native American Homelands

We acknowledge that we are presently on unceded land of the Gabrielino/Gabrieleño Tongva, Ventureño Chumash, Gabrielino Kizh, Fernandeño Tataviam Band of Mission Indians, and the San Manuel Band of Mission Indians. We recognize that these Tribes are still present and that they are the original stewards of this land and waters.

We make this acknowledgement out of respect for their long-standing connection to and protection of this area's watersheds.

We honor their elders, both past and present, and their descendants. We have the responsibility to carry out actions in unceded lands that will meaningfully involve citizens of these tribes.



NBS BLUE RIBBON PANEL

Eileen Alduenda

Claudia Arends

Patrick Atwater

Amanda Begley

Isaac Brown

Dan Cooper

Maggie Gardner

Bruce Hamamoto

Kelsey Jessup

Samantha Johnson

Nurit Katz

Dan Knapp

Gary Lai

Stephanie Landregan

Gabriella Lassos

Claire Latané

Esther Lofton

Annelisa Moe

Mark Nguyen

Natalie Ouwersloot

Claire Robinson

Geraldine Trivedi

Jane Tsong

Andrea Vona

Melina Watts

Melanie Winter

Council for Watershed Health

US Forest Service

Crescenta Valley Water District

TreePeople

Stillwater Sciences *(Alt – Wendy Katagi, Rowan Roderick-Jones)*

Resource Conservation District of the Santa Monica Mountains

LA Waterkeeper *(Alt – Bruce Reznik)*

LA County Department of Public Works

The Nature Conservancy

Tongva Taraxat Paxaavxa Land Conservancy

LADWP/UCLA

Conservation Corps of Long Beach

Quixotic Nature-based Solutions

UCLA Extension

Sacred Places Institute for Indigenous Peoples

Cal Poly Pomona

UC Cooperative Extension

Heal The Bay

City of Los Angeles, Sanitation *(Alt – Michael Scaduto)*

Foothill MWD

Amigos de los Rios

City of Redondo Beach

Watershed Conservation Authority

LA County Parks & Recreation

LA County Safe Clean Water Program

The River Project

PRIORITY TASKS

- 1. Develop Countywide definition(s) and standard(s) for Nature-based Solutions**
2. Prioritize Nature-based Solutions in stormwater capture projects
3. Build upon the Safe, Clean Water Program's Metrics & Monitoring Study and 2022 Interim Guidance

NbS TASK FORCE: RECAP

Progress to Date

- Developed working definition of NbS
- Initiated development of NbS Standard
- IUCN Presentation on NbS Standard by Dr. Emmanuelle Cohen-Shacham

Path Forward

- Continue development of NbS Standard
- January 2025: Submitting Technical Memo/Lit Review
 - Review relevant case studies
 - Include relevant resources from BRP discussions

SUMMARY OF BRP MEETING 2

Working Definition of NBS

“Actions to adaptively conserve, protect, restore, and sustainably manage terrestrial and aquatic ecosystems while simultaneously creating resiliency and benefiting societal and human well-being, ecosystem function, and biodiversity.”

EXERCISE

Definition Gut-Check

- Help refine the BRP's definition by providing your expertise and feedback
- [Miro Board](#)
 - Click the link in the chat to open the board.
- Review the Content
 - Explore definition on the board.
- Share Your Thoughts
 - Use post-it notes to:
 - **Affirm: Highlight what works well**
 - **Question: Raise questions about the content.**
 - **Raise Concerns: Note gaps or potential issues.**
 - **Suggest: Add ideas on what else should be included.**
- Time Limit
 - Spend 10 minutes engaging with the exercise.

SUMMARY OF BRP MEETING 2

Working Language

Criteria	Criterion 1: NbS are appropriate to the local social and ecological context.	Criterion 2: NbS are designed and regularly monitored and evaluated based on scientific, indigenous, traditional, and local knowledge.	Criterion 3: NbS are economically viable.
	<ul style="list-style-type: none"> NbS planning process includes a comprehensive constituent map analysis to identify those who may be directly and indirectly impacted by the NbS. Undertake a baseline assessment to characterize current social and ecological conditions, and then outline options for improvements using living processes and infrastructure. 	<ul style="list-style-type: none"> NbS design includes a clear and measurable monitoring and evaluation plan. NbS design and implementation consults landscaping specialists with ties to the local and/or indigenous community and who use local and native plants. 	<ul style="list-style-type: none"> NbS are self-sustaining, requiring minimal operations and maintenance in the long term (10+ years). Undertake a cost-benefit analysis of the NbS, including direct and indirect costs, benefits, and associated societal externalities.

LITERATURE REVIEW + TECHNICAL MEMO Update

Task 1.3: Compile existing definitions, frameworks, and case-studies, and examples of NbS, including those originally developed by the International Union of Concerned Scientists. Include reference to and compile information related to governance documents, guidance documents, and needs related to NbS within the County, including information from the SCWP Metrics and Monitoring Study, SCWP Ordinance and Interim Guidance, and related items.

1. Research existing definitions, frameworks and guidance
2. Research NbS efforts from other similar municipalities in similar climates
 - a. Seattle, WA
 - b. Tuscon, AZ
 - c. Barcelona, Spain
3. Synthesize findings in the Technical Memorandum.

Review Process

1. Deliverables will undergo up to two (2) rounds of review with Public Works.
2. CWH will edit and submit a revised deliverable.

IUCN RESOURCES

Definition + Standard

Definition

“Nature-based Solutions (NbS) are defined as:

- "Actions to protect, sustainably manage, and restore natural or modified ecosystems, which address societal challenges effectively and adaptively, providing human well-being and biodiversity benefits."

Purpose

- Provide a global framework for designing, verifying, and scaling up NbS.
- Ensure NbS yield desired outcomes in addressing societal challenges while delivering multiple benefits.
- Support systematic learning and improvement, offering credibility and consistency to stakeholders.
- Foster adaptive management and alignment with global sustainability goals.

Criteria + Indicators

- Effectively Address Societal Challenges
- Informed by Scale
- Net Gain to Biodiversity
- Economically Viable
- Inclusive Governance
- Balance Trade-offs
- Adaptively Managed
- Sustainable and Mainstreamed

Methodology: The framework was developed through a collaborative process involving over 800 experts and practitioners worldwide, who synthesized evidence, case studies, and interdisciplinary research to establish the eight key criteria and indicators for NbS.

GLOBAL PERSPECTIVES

Eclipse Project

Purpose + Focus:

- Develop a framework for evaluating NBS performance in addressing urban climate resilience and identify criteria for assessing environmental, economic, and societal benefits.
- More focused on urban areas, does not offer a formal definition, funded by European Commission
- Offers project level guidance

10 Key Challenges: Climate mitigation and adaptation, Water management, Coastal resilience, Green space management (including urban biodiversity), Air/ambient quality, Urban regeneration, Participatory planning and governance, Social justice and social cohesion, Public health and well-being, New economic opportunities and green jobs

Indicator Selection Guidance:

- Align indicators with specific societal challenges.
- Tailor indicators to geographic scales:
 - Micro-scale: Site-specific impacts (e.g., localized cooling or flood reduction).
 - Meso-scale: Regional benefits (e.g., habitat connectivity, systemic flood management).
- Tailor indicators to temporal scales:
 - Short-Term (0–5 years): Immediate effects like water retention or behavioral changes.
 - Medium-Term (5–10 years): Intermediate outcomes like species recovery or reduced air pollution.
 - Long-Term (>10 years): Systemic impacts like carbon sequestration or sustained public health improvements.
- Consider trade-offs, co-benefits, and synergies when selecting indicators.
- Ensure feasibility based on data availability, measurement tools, and technical expertise.
- Establish a **baseline** before implementation to track effectiveness and enable comparative analysis (e.g., control sites).

GLOBAL PERSPECTIVES

European Commission Indicator Handbook

Purpose + Definition:

- Build on EKLIPSE framework to offer project-level guidance for indicator selection and evaluation, expand focus to additional societal challenges and scales of NBS application.
- NBS are "solutions that are inspired and supported by nature, cost-effective, simultaneously provide environmental, social, and economic benefits, and help build resilience. Such solutions bring more, and more diverse, nature and natural processes into cities, landscapes, and seascapes through locally adapted, resource-efficient, and systemic interventions."

12 Key Challenges: Climate resilience, Water management, **Natural and climate hazards**, Green space management, Biodiversity enhancement, Air quality, Place regeneration, **Knowledge and social capacity building**, Participatory planning and governance, Social justice and social cohesion, Health and well-being, New economic opportunities and green jobs

- Offers suggested indicators for each challenge, and notes the need for additional indicators tailored to specific projects and their objectives.
- Indicators should also be evaluated in relation to the three NBS types and Indicator types

Indicator types + NBS Types

- Structural (S): Assess resources and policies during planning, Process (P): Evaluate efficiency and quality during implementation, Outcome (O): Measure impacts and results after implementation
- Type 1: Minimal intervention (e.g., conservation) – Focus on ecosystem services, Type 2: Managed ecosystems (e.g., agroforestry) – Address trade-offs and multifunctionality, Type 3: Intensive management (e.g., green roofs) – Measure specific impacts like flood mitigation.

Indicator types (structural, process, outcome) align with NBS types by assessing the resources, methods, and impacts specific to the level of ecosystem intervention

Request for Additional Resources

- Definitions of NBS
- Policy Documents
- Scientific Papers
- Resources from International Agencies or Organizations that may be working on NBS

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Wrap up and Next Steps

Task Force - Feedback - Virtual Meetings

- ~~Report out on Session 1 - October 22~~
- ~~Report out on Session 2 - November 12~~
- Preview of Session 3 - December 17 - Lit Review + Definition
- Report out on Session 3 - January 21 - Recommendations for SCWP

Blue Ribbon Panel - Participant Commitment - In Person Meetings

- ~~Working Session 1 - Sept 24 - NbS Definition & Standards~~
- ~~Working Session 2 - November 12 - Definitions, Criteria, & Standards (cont.)~~
- Working Session 3 - December 17 - Standard(s) (cont.)
- Working Session 4 - January 21 - Recommendations for SCWP



**Keep
in
touch!**

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