



Society for Conservation Biology

A global community of conservation professionals

North America Policy Program Webinar Series:

Bottom Up Policy: The role of SCB Chapters in policy development



Dr. Marit Wilkerson

america adapts
NORTH AMERICA POLICY PROGRAM
Society for Conservation Biology 



Society for Conservation Biology

A global community of conservation professionals

An Overview of SCB

*A global community of conservation
professionals and students*



www.conbio.org



@Society4ConBio

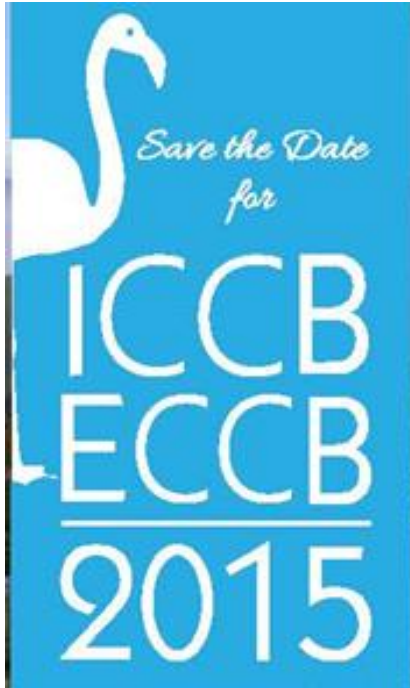


Facebook.com/Society4ConBio



Society for Conservation Biology

A global community of conservation professionals



ICCB 2015

2-6 August, 2015

Montpellier, France

Mission Biodiversity: Choosing new paths for conservation

Deadline to submit abstracts for contributed oral, speed, and poster presentations for ICCB 2015 is January 31. Visit www.iccb-eccb.org for details.



Society for Conservation Biology

A global community of conservation professionals

Future Policy Webinar Topics

- Feb. 4th, 2:30 pm EST: Endangered species and Policy Responses - Bret Hartle, Center for Biological Diversity.
- March 4th, 2:30pm EST, Ecosystem Services and Biodiversity - Rob Griffin, Natural Capital Project
- April 15th, 2:30 EST, Adaptation Planning at the State Level, Bob Glazer, Florida Fish and Wildlife Conservation Commission
- June, Scenario Planning as a Conservation Tool, Melinda Koslow, National Park Service
- **Misc. - Blogging opportunities.**



Chapters

Working locally to achieve conservation success

Bottom Up Policy the role of SCB Chapters in policy development

**Alternate title:
Processes & ideas to affect local
change for conservation**

Presented by: Marit Wilkerson

Special thanks to Doug Parsons & Nate Spillman, Jessa Madosky & Andy Gregory (Chapters Committee), Rosie Hartman (formerly SCB-Davis), Monica Awasthy & Simone Birrer (Sydney), Julian Beaman (Brisbane UQ), and Ilona Naukokaitis-Lewis (formerly Toronto)

Howdy! I'm Marit

 **Marit Wilkerson** @MaritWilk · Jan 8
SCB Chapters engage w their communities in diverse ways! Learn more Jan 14:
buff.ly/1tNPkqC @Society4ConBio



← ↻ 2 ★ ...

[View more photos and videos](#)



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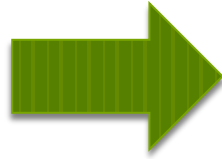
Our objective

- To inspire and enable you!





Effective strategies create measurable change



Kumutoto Forest Restoration Project
Victoria University Wellington Chapter
Wellington, New Zealand

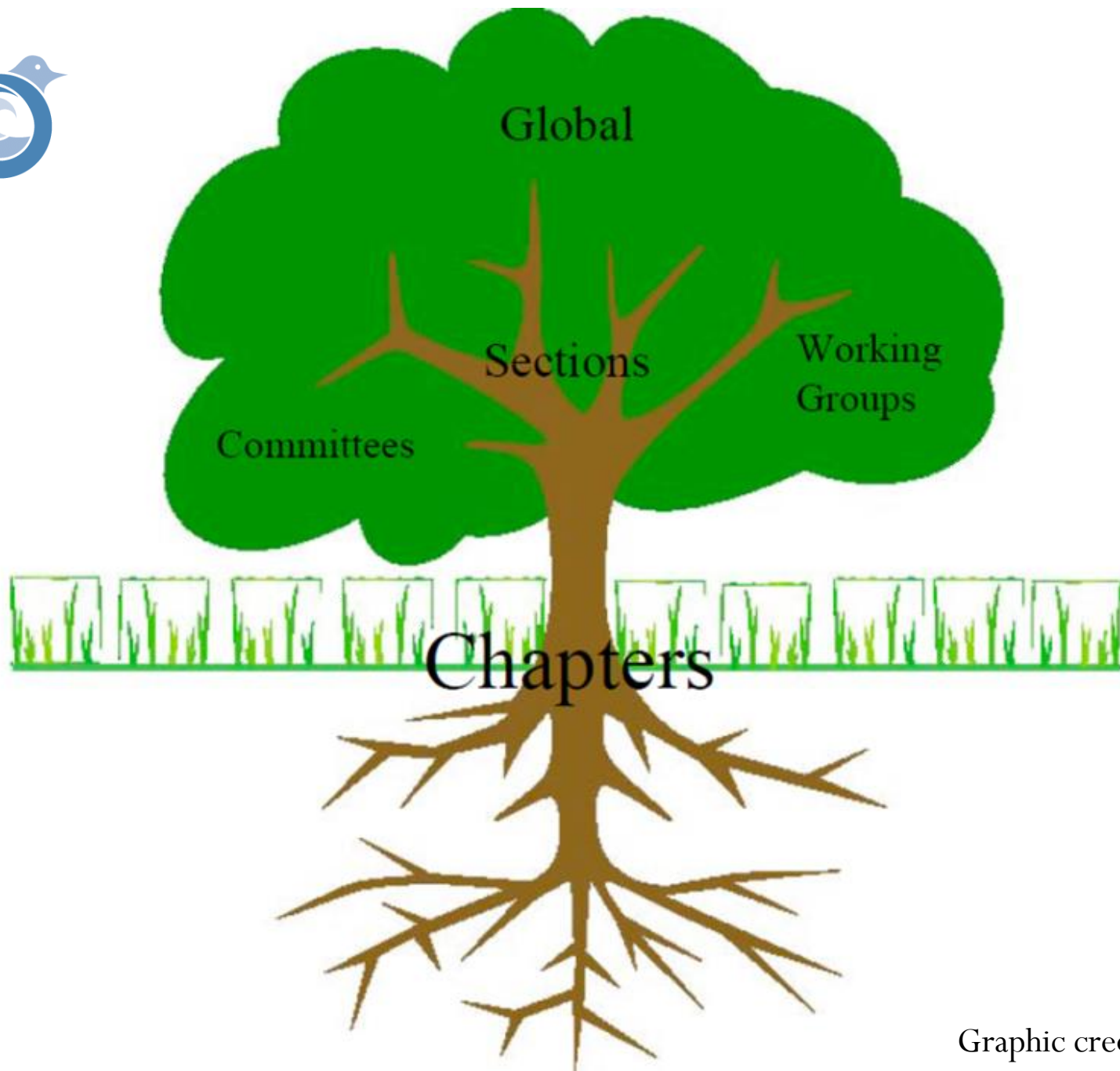
*See Appendix slides for detailed description of Chapter activities & results



Roadmap



- Role of SCB chapters (& small conservation groups in general!)
- Framework of engagement practice
- Actionable next steps for you and your group
- Questions & follow up



Graphic credit: F. Nagle



SCB Chapters embrace diverse engagement activities

Professional &
Academic

Connecting &
Communicating

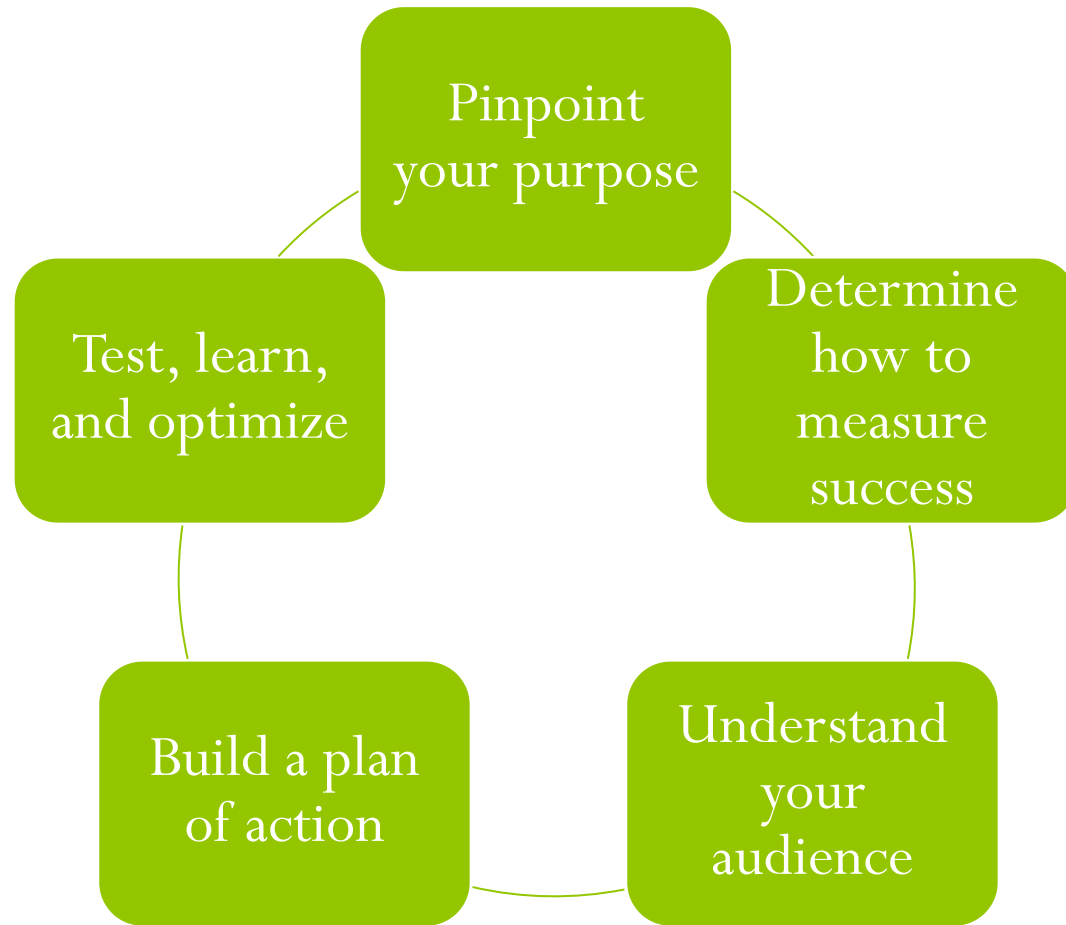


Engagement &
Advocacy

*See Appendix slides for more detailed breakdown of SCB chapter activities and strategies



One simple & powerful framework



*This is a distillation of many more intricate and specific frameworks for creating change. To see models that may be more aligned with your specific needs and challenges, please see Appendix slides.



Pinpoint your purpose

Could be:

- Research
 - Awareness
 - Bonding
 - Behavior changes
 - Fundraising
 - Policy
- (among many more)



Humboldt State University Chapter
Biodiversity Conference



Kingston Chapter
Photo contest at Queen's University



- Mission statement of policy committee: “Through our activities we hope to establish biodiversity conservation as the primary focus of public policies on a) protected area management, b) land use/marine planning processes, and c) species at risk conservation; and work towards ensuring that these policies are science-based, effective, and adequately implemented and enforced”



- Narrow down goals → focus on drivers of koala decline
- Construct background lit database and research policy history
- Connect with individual MP's & public servants



Determine how to measure success

S.M.A.R.T objectives could be:

- # m² planted this spring
- \$ raised for a cause in 2 wks
- % of target community involved in project over 1 yr
- Passed legislation supported by A,B, & C legislators



Citizen science project from Toronto Chapter sampling pollinators.
For more information on their work, see slide XX in the appendix

S.M.A.R.T.: S(pecific) M(easurable) A(chievable) R(elevant) and T(ime-limited)
[National Co-Ordinating Centre for Public Engagement (NCCPE)]



- Purpose: Increase (local) conservation literacy around pollinators
 - To volunteer base
 - To landowners around Rouge Park



Number of volunteers	Field	Lab
2012	46	30
2013	51	40

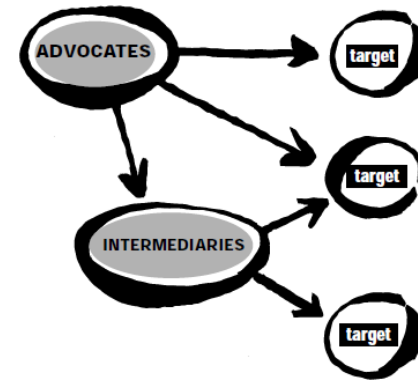
- Field sampling skills
- Experimental design
- Plant survey methods and identification
- Bee identification
- Pinning techniques
- Catalogue and processing of specimens



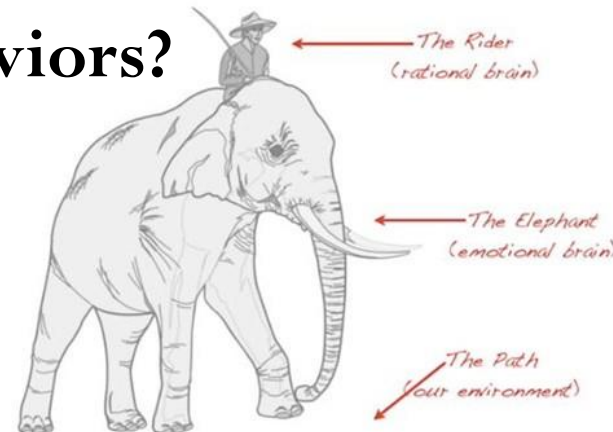
Understand your audience

- **Who are they?**
(build audience personas)
- **What do they need and value?**
(consider and address barriers)
- **Who do they listen to?**
(identify champion/influencer)
- **How to change their behaviors?**

“Conservation decision-making is a ‘tournament of values’” (Robertson & Hull 2010)



Enabling EcoAction Handbook



*More information about understanding your audience please see Appendix slides



Build a plan of action

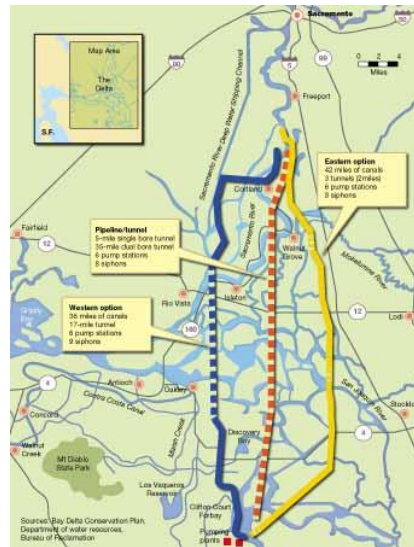
- Align with objectives & metrics
- Not everything will work and that's OK!
- Learning is part of doing



Texas A&M Chapter
Annual Brazos Valley Bioblitz

*For specific ideas for things to try, see Appendix slides

DAVIS CHAPTER



- Policy briefs on:
 - New fracking regulations in California
 - Plastic bag ban in the City of Davis
 - Referendum on new water project for City of Davis
 - San Francisco Bay-Delta Conservation Plan (BDCP)



Test, learn, and optimize!

- Monthly, quarterly, annually
- Determine testing lifetime to identify unsuccessful initiatives
- Share your outcomes with SCB & conservation peers!



Little Penguin monitoring & habitat restoration
Sydney Chapter

*For a list of best practices distilled from multiple communities and literature, see Appendix slides



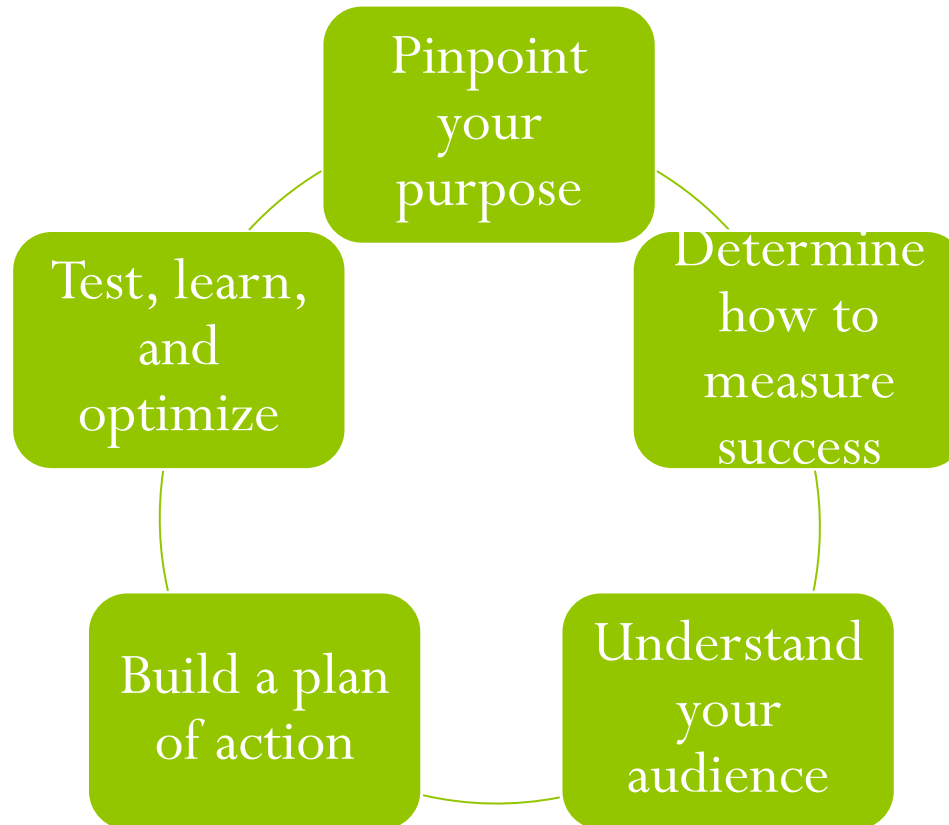
What can YOU do in your conservation group?

- Organize volunteer restoration event in local native habitat with desired X number of participants
- Conduct bird, insect, plant counts for local non-profit (or your own!) with X number of fellow volunteer experts (or train them!)
- Tweet 3x/wk about local conservation policies, projects, or groups
- Host public seminars about local/regional effects of climate change, water conservation, soil erosion, etc. w/ X number of participants each (and not just your friends!)
- 1x/wk take a look at what's happening in your City Council or state/regional legislation
- Organize silent auction at your next conference and donate proceeds to local conservation organization



What can YOU do in your conservation group?

- Remember to always match your activities with your purpose and metrics!!



Questions, Challenges, Successes, Stories?



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Website: **www.maritwilkerson.com**



Kumoto Forest Restoration

Community projects

Volunteering

Research



KUMUTOTO RESTORATION PROJECT

5 MINUTE BIRD COUNT

DATE: _____
OBSERVER: _____

COUNTS:	1	2	3	4
Temperature				
Time				
Sun				
Precipitation				
Showers				
Wind				
Other Noises				

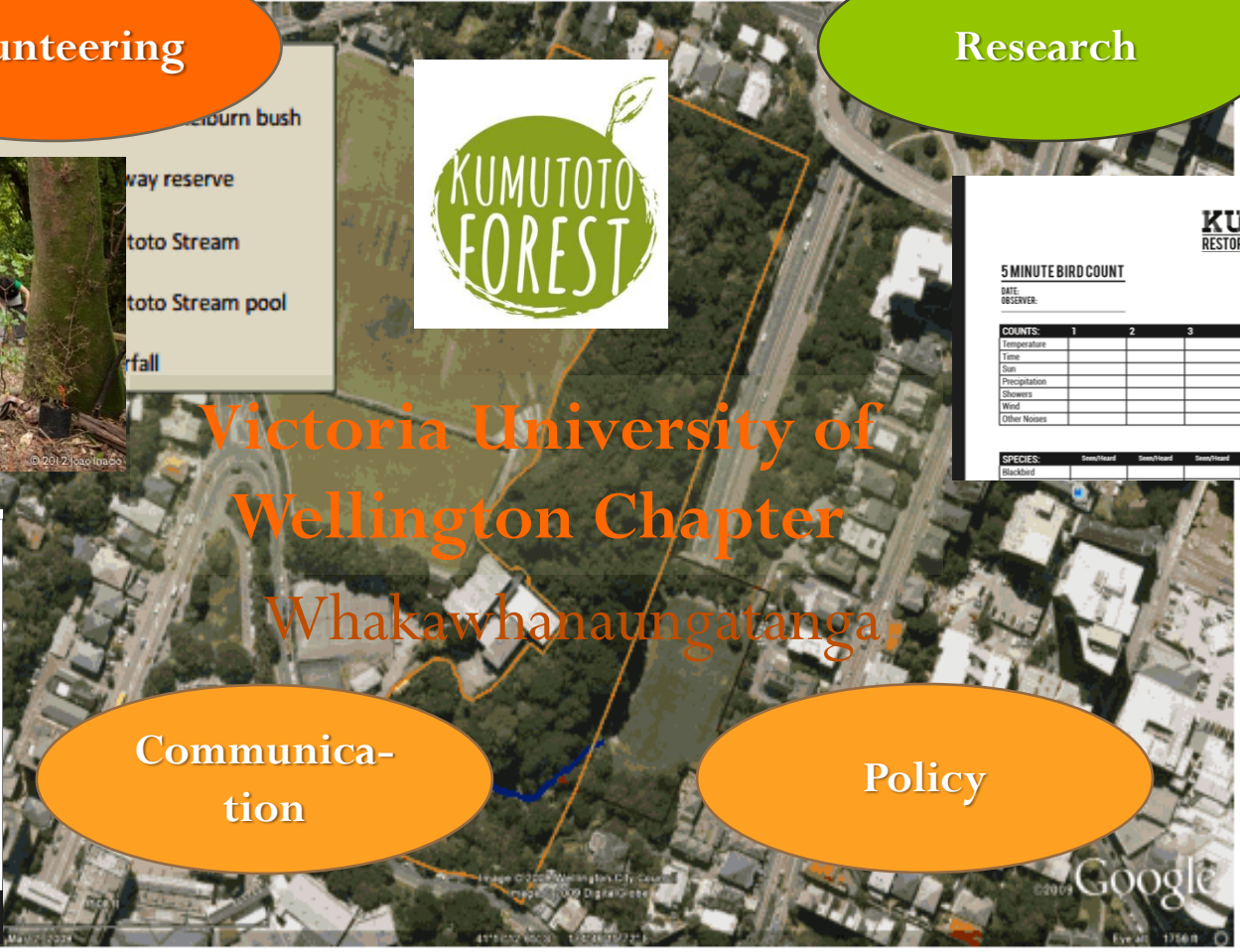
SPECIES: Shearwater Shearwater Shearwater Shearwater NOTES: _____

Blackbird

Victoria University of Wellington Chapter
Whakawhanaungatanga

Communication

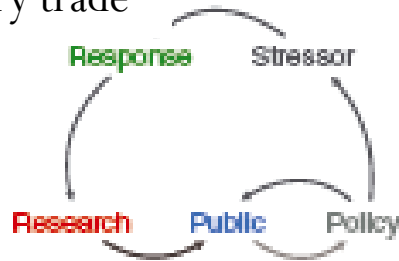
Policy



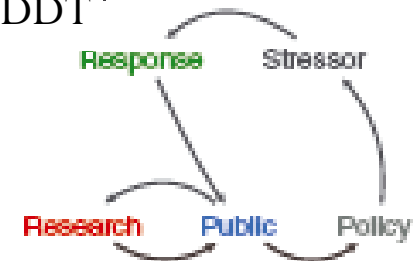


“Pathways to conservation success”

Ivory trade

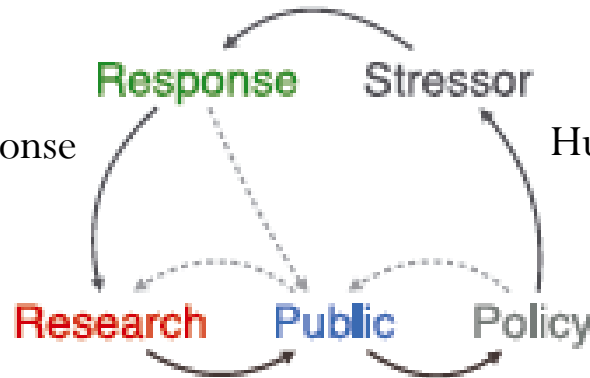


DDT



Ecological response

Human-mediated drivers

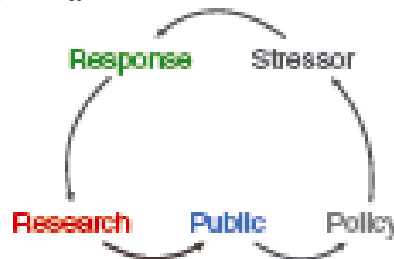


Peer-reviewed papers

Policy events

News stories

Acid rain





If your goal is engagement through research

Synthesis

Public Participation in Scientific Research: a Framework for Deliberate Design

[Jennifer L. Shirk](#)¹, [Heidi L. Ballard](#)², [Candie C. Wilderman](#)³, [Tina Phillips](#)¹, [Andrea Wiggins](#)⁴, [Rebecca Jordan](#)⁵, [Ellen McCallie](#)⁶, [Matthew Minarchek](#)¹, [Bruce V. Lewenstein](#)⁷, [Marianne E. Krasny](#)⁸, and [Rick Bonney](#)¹

- Public participation in scientific research (PPSR)
- To have an impact, PPSR should aim for one or more outcomes:
 - outcomes for research
 - outcomes for individual participants
 - outcomes for social-ecological systems



Citizen science project from Toronto Chapter
Sampling pollinators



If your goal is engagement through research

Models of PPSR

Contractual

Scientists do the project for the public

Contributory

Project designed by scientists, public collects data

Collaborative

Project designed by scientists and assisted by participants

Co-created

Project designed by both scientists and the participants; high level of involvement in scientific process

Collegial

Public does the project independently



If your goal is engagement through research

Models of PPSR

Contractual

Scientists do the project for the public

Contributory

Project designed by scientists, public collects data

Collaborative

Project designed by scientists and assisted by participants

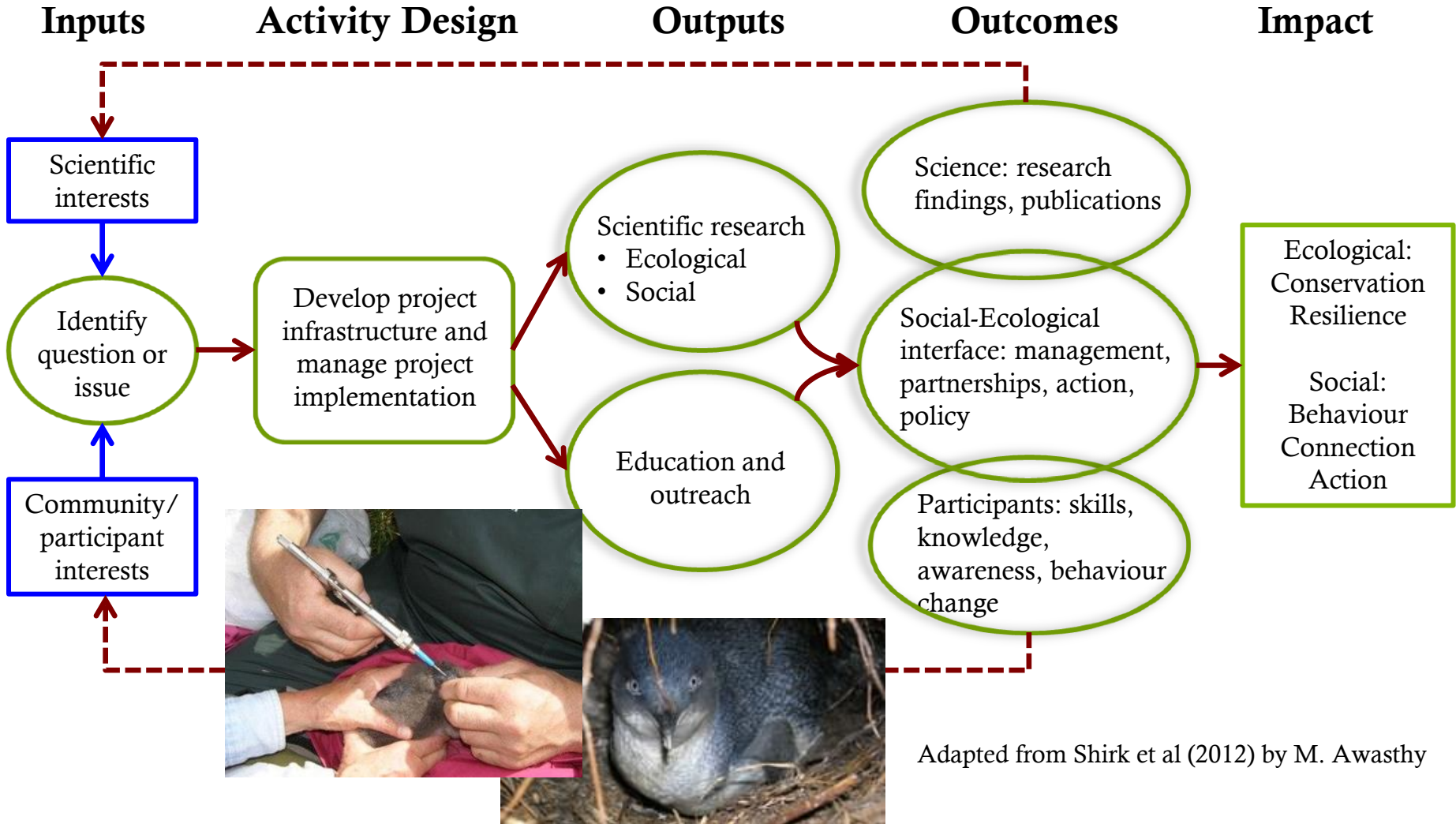
Co-created

Project designed by both scientists and the participants; high level of involvement in scientific process

Collegial

Public does the project independently

PPSR Framework



Little Penguin

Adapted from Shirk et al (2012) by M. Awasthy



If your goal is engagement, whatever form that may take

- “Public engagement describes the myriad of ways in which the activity and benefits of conservation groups can be shared with the public. Engagement is by definition a *two-way process*, involving interaction and listening, with the goal of generating mutual benefit.” [emphasis mine]
 - National Co-Ordinating Centre for Public Engagement (NCCPE)

<http://www.publicengagement.ac.uk/>



Determine your reason/purpose

- Inspire
 - Stimulate, motivate, stir, instigate, enthuse
- Disseminate
 - Broadcast, publicize, spread, propagate
- Involve
 - Engage, include, engross, embrace
- Consult
 - Refer to, check, confer, discuss
- Encourage
 - Boost, embolden, move, urge, support
- Collaborate
 - Work together, join forces, team up



Humboldt State University Chapter
Biodiversity Conference



Kingston Chapter
Photo contest at Queen's University



ALWAYS determine your audience!

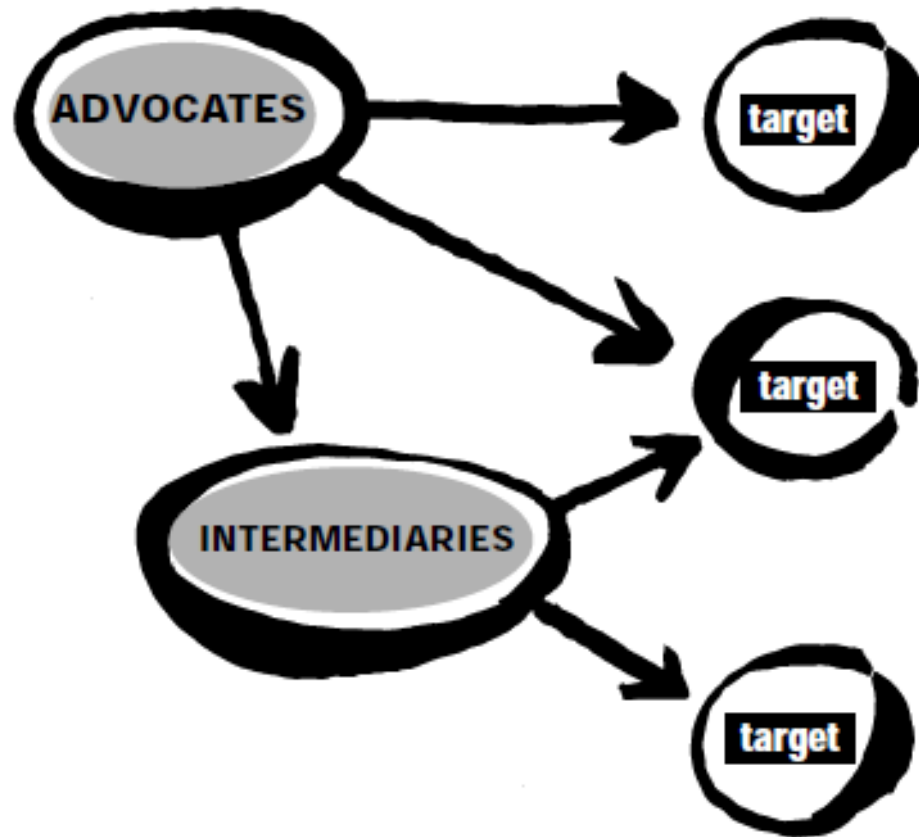
- Types of demographic categories: age, gender, socioeconomic status, education level, ethnicity, geographic area, interests
- Steps to identify & understand your audience:
 - Build a profile
 - Work with audience you know
 - Identify a champion/influencer
 - Consider & address barriers
 - Transport, disposable income, timing, interest, trust level, relevance, language, awareness, food



Texas A&M Chapter
Annual Brazos Valley Bioblitz

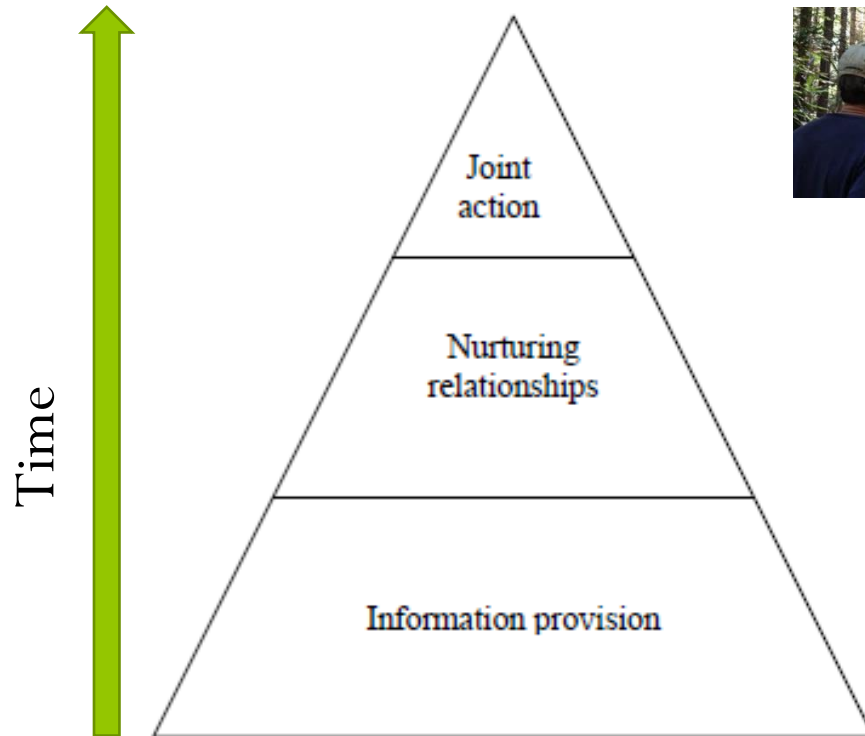


Players within your target audience





Stages of engagement



Dating the Decision-makers, v 1.1
International Institute for Sustainable
Development



Evaluation

- Plan of action at the beginning of program (NOT the end)
 - Have an overarching aim (big picture)
 - Make your collective objectives SMART: S(pecific)
M(easurable) A(chievable) R(elevant) and T(ime-limited) NCCPE
- Have indicators
 - What specific questions (like a research question!)
 - Qualitative or quantitative?
 - Process-oriented
 - Outcome-oriented (impact assessment)
 - Counterfactuals, BACI (before-after control-impact), RCT (randomized controlled trials)



THE 7 ELEMENTS OF AN EFFECTIVE CHANGE PROGRAM





Best practices

- Be responsive to group membership
- Distribute leadership responsibilities
- Build & maintain relationships
- Have regular and frequent activity
- Focus on specific behaviors to change
- Embrace the importance of values
 - “Conservation decision-making is a ‘tournament of values’”
(Robertson & Hull 2010)



Policy as a particular type of engagement

- “the ultimate purpose of conservation science is to inform and affect conservation policy”

Essays

Beyond Biology: toward a More Public Ecology for Conservation

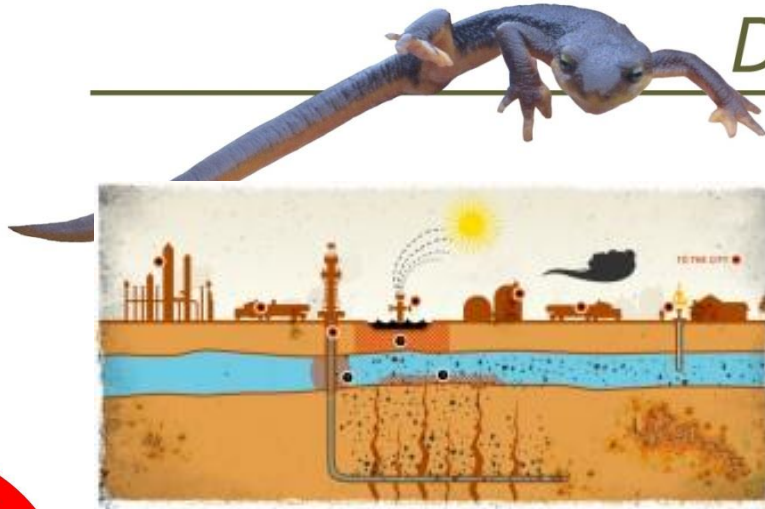
DAVID P. ROBERTSON AND R. BRUCE HULL*

Department of Forestry, College of Natural Resources, Virginia Tech (0324), Blacksburg, VA 24061, U.S.A.

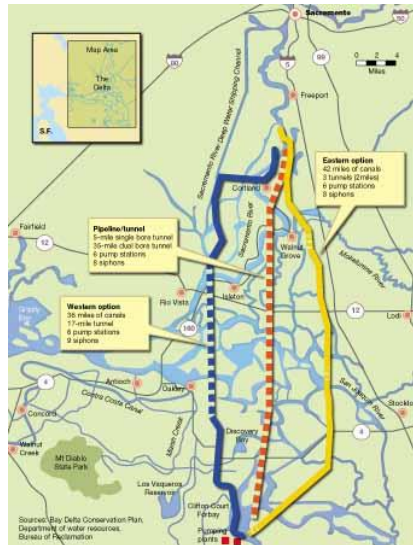


SCB Chapters do policy

DAVIS CHAPTER



- New Fracking regulations in California
- Plastic bag ban in the City of Davis
- Referendum on new water project for City of Davis
- San Francisco Bay-Delta Conservation Plan (BDCP)



Slide adapted from R. Hartman



SCB Chapters do policy

DAVIS CHAPTER



- 2-6 people for each brief
- Consulted with local experts on Bay Delta Conservation Plan
- Disseminated to: City Council contacts, forums for public comments, local lobbyists, local listservs, letter to the editor for local newspaper
- Received thank you's from specific contacts and general public via forums



SCB Chapters do policy



Society for Conservation Biology
Brisbane-UQ Chapter

A community of conservation professionals based in Brisbane and The University of Queensland



- Brisbane G20 'People's Declaration' organized by the United Nations Association of Australia, Queensland
 - Had representative (ex politician from Queensland) speak to Chapter and then asked for a statement from the Chapter
 - 4 Chapter members, quick turn-around
 - Representative very grateful and pleased

Measuring and accounting for the true cost of natural resource use: A contribution to the Brisbane G20 'People's' Declaration

The Society for Conservation Biology Brisbane & University of Queensland Chapter*

Today in Queensland there are approximately 15 000 abandoned mine sites with an estimated public liability of \$1 billion for their rehabilitation¹. Deforestation and other causes of biodiversity loss also continue to diminish the natural capital and provision of ecosystem services upon which human societies and economic systems ultimately depend^{2,3,4}. It is clear that economic prosperity and growth are inherently linked to the health of the natural environment.

We believe that environmental health is consistently overlooked when short-term growth is emphasised in financial policies. Furthermore, the cost of environmental degradation is not accounted for in indicators of economic growth such as Gross Domestic Product (GDP)⁵. More comprehensive measures of economic development, such as the Genuine Progress Indicator (GPI), do incorporate impacts on environmental health and sustainability⁶. The meeting of the G20 leaders in Brisbane is an excellent opportunity to make a commitment to ecologically sustainable development.

Recommendations:

The people of Brisbane urge G20 leaders to:

1. Ensure that economic targets are ecologically viable and sustainable beyond the current five year targets.
2. Incorporate impacts on environmental health into indicators of economic growth.
3. Support evidence-based decision-making and policy development that explicitly take into account the true value of natural capital and ecosystem services.

References:

1. Queensland Audit Office. 2013. Environmental regulation of the resources and waste industries, Report 15: 2013 – 14, The State of Queensland: Brisbane.
2. Isbell, F., Calcagno, V., Hector, A., Connolly, J., Harpole W. S., Reich, P. B., Scherer-Lorenzen, M., Schmid, B., Tilman, D., van Ruijven, J., Weigelt, A., Wilsey, B. J., Zavaleta, E. S., Loreau, M. 2011. High plant diversity is needed to maintain ecosystem services, *Nature*, 477:199-203.
3. Costanza, R., and H. E. Daly. 1992. Natural Capital and Sustainable Development. *Conservation Biology* 6:37-46.
4. Costanza, R., R. D'Arge, R. De Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. V. O'Neill, J. Paruelo, R. G. Raskin, P. Sutton, and M. Van Den Belt. 1997. The value of the world's ecosystem services and natural capital. *Nature* 387:253-260.
5. Kubiszewski, I., R. Costanza, C. Franco, P. Lavan, J. Talberth, T. Jackson, and C. Ayllmer. 2013. Beyond GDP: Measuring and achieving global genuine progress. *Ecological Economics* 93:57-68.
6. Smith, L. M., J. L. Case, H. M. Smith, L. C. Harwell, and J. K. Summers. 2013. Relating ecosystem services to domains of human well-being: Foundation for a U.S. index. *Ecological Indicators* 28:79-90.

*The Society for Conservation Biology (SCB) is an international professional organisation dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity and has more than 10,000 members world-wide. The Brisbane & University of Queensland SCB Chapter was initiated in 2010, and aims to bring together conservation scientists, land managers, economists, legal professionals and social scientists who share the SCB's mission of advancing the science and practice of conserving the Earth's biological diversity.

Contact: Julian Beaman, Policy Committee Leader, SCB Brisbane-UQ Chapter
(j.beaman@uq.edu.au)

Statement of issue &
viewpoint

Recommendations
(numbered!!)

References

Authors & contact



SCB Chapters do policy



Society for Conservation Biology
Brisbane-UQ Chapter

A community of conservation professionals based in Brisbane and The University of Queensland



- Next steps?
 - Narrow down goals → focus on drivers of koala decline
 - Doing background literature and policy research
 - Constructing background database
 - Want to meet with individual MP's & public servants

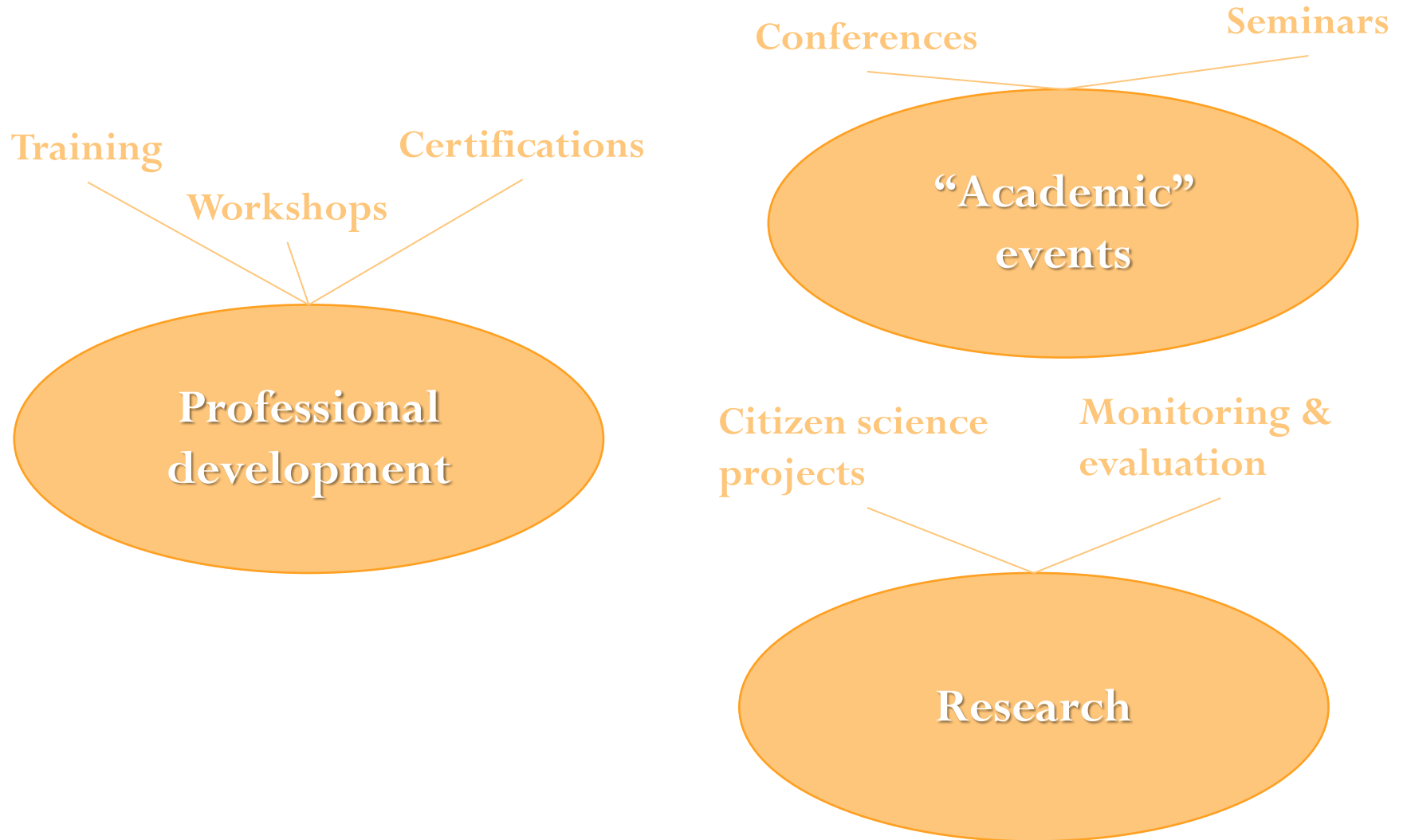


Best practices

- Pay attention to upcoming legislation...or pick long-term issues
 - *Timing is essential*
- Do your background research
- Focus on local issues
- *Build relationships*
- *Know how to craft a policy brief!*

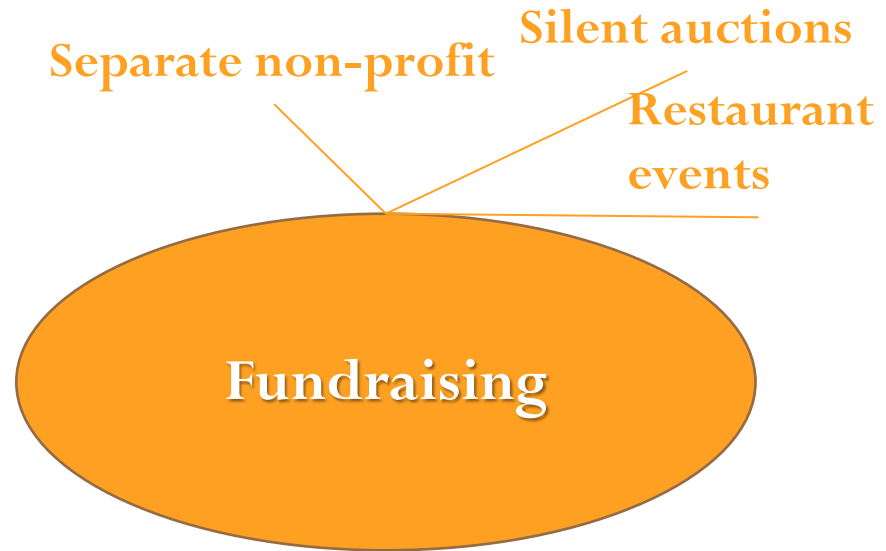
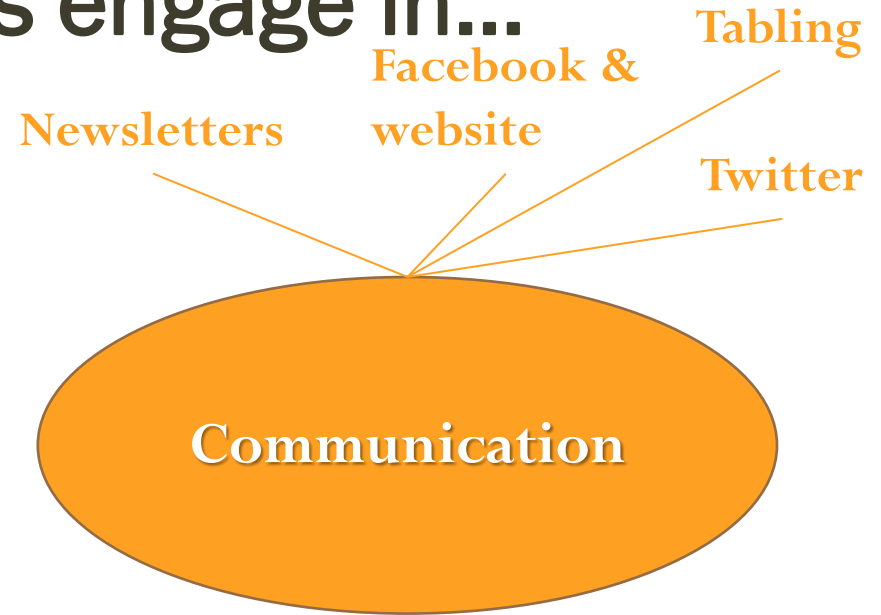
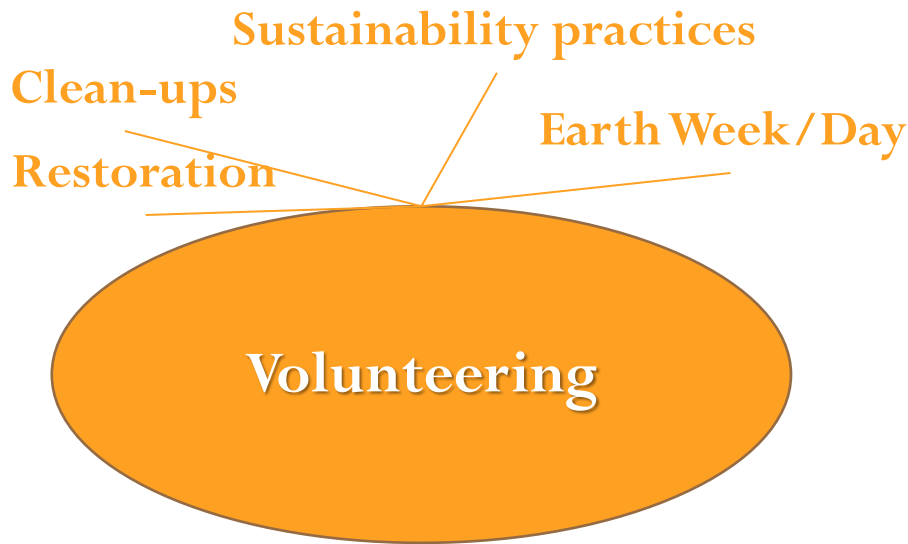


SCB Chapters engage in...



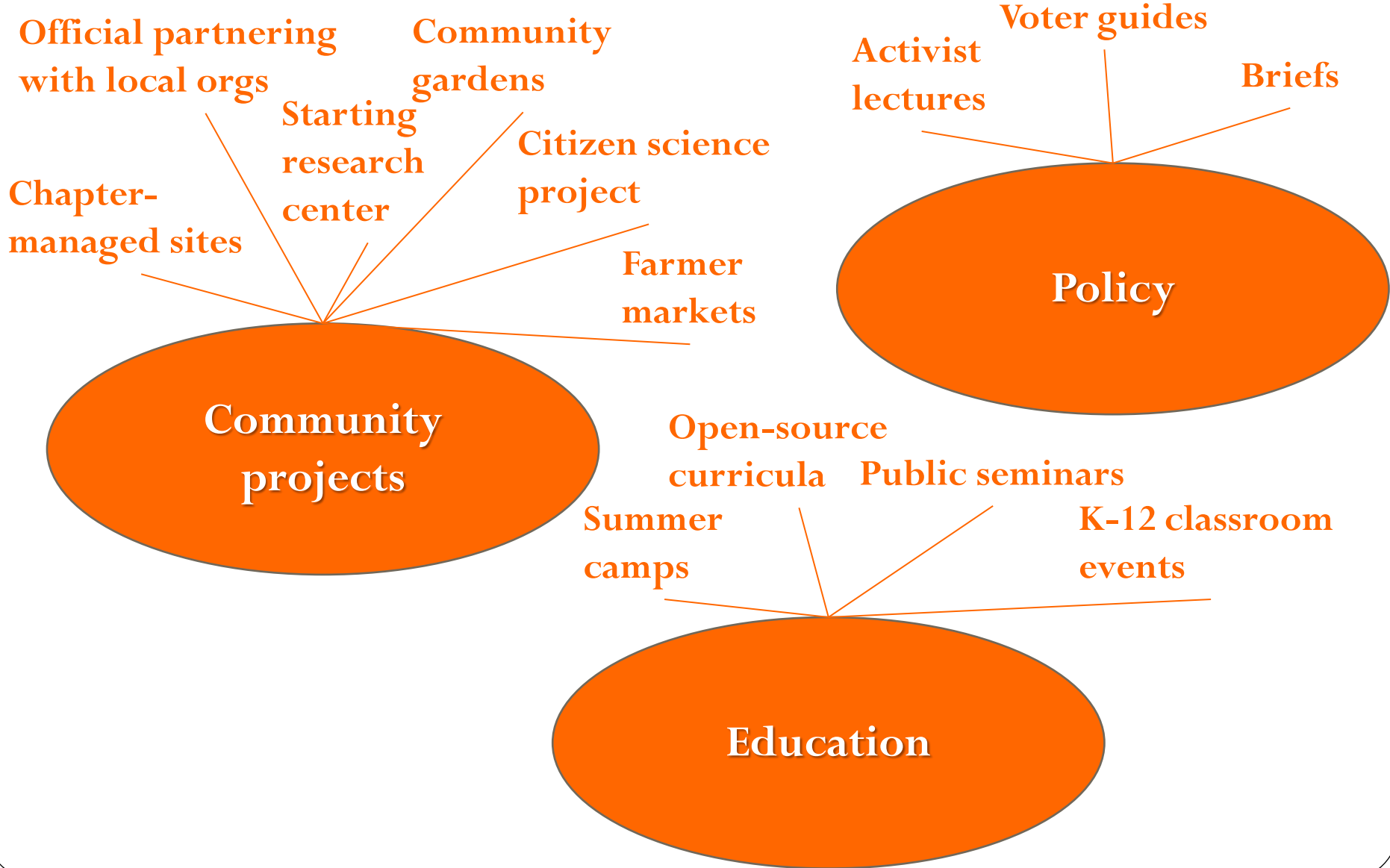


SCB Chapters engage in...





SCB Chapters engage in...





Process of engagement

- Purpose (why?)
- Audience (who?)
- Activity (what?)
- Evaluation (how?)

NCCPE

- Formative research
- Audience participation in design
- Setting actionable objectives
- Making your program measurable
- Know your audience
- Designing your program as a cycle
- Start planning your program
- Crafting strong messages
- Designing an integrated communication campaign
- Pre-test

- Goal setting
- Audience identification
- Appropriate suite of tools
- Evaluation and revision

International Institute for Sustainable Development

Enabling EcoAction Handbook

The Rider, The Elephant, and The Path

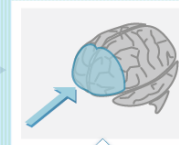
(from the book)

(in your brain)

1



is a metaphor for



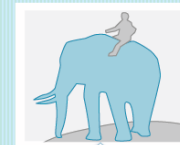
The Rider

The Rider loves to contemplate and analyze, doing so with a negative bias, almost always focusing on problems rather than solutions. The Rider is frustrated by uncertainty and easily exhausted.

The rational mind

Typified by the prefrontal cortex, the area of the brain that looks for patterns, makes plans, predicts the future, monitors the self, and attempts to distinguish between and suppress animal instincts.

2



is a metaphor for



The Elephant

The elephant is easily spooked and hates doing things with no immediate benefit. It is stubborn, needs reassurance, and is quickly demoralized. But it is powerful, tireless, and difficult to actively direct.

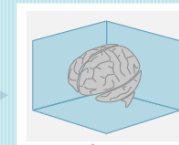
The emotional mind

Typified by the amygdala, the root of fear and trigger of the body's stress response. Negative emotion has a narrowing effect on range of thought. Positive emotion allows the mind to wander creatively.

3



is a metaphor for



The Path

Even when the Rider and the Elephant cooperate, they must know what direction to head. Without a clear vision of the destination, change will not happen. The Elephant tends to follow the path of least resistance.

The environment

External stimuli make up the world that the mind consciously and unconsciously interprets and reacts to. Forces like convenience, distraction, and cognitive biases play a significant role in directing behavior.

Adapted from a book by Dan and Chip Heath:

Switch (How to change things when change is hard)