Reduce Toxic Threats GMAP

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State of Washington

December 3, 2010

- Reducing Toxic Threats
  - Prevention
  - Management
  - Cleanup
- Update on strategic focus areas
  - Products
  - Toxic air emissions
  - Stormwater
- Follow-up
  - Assignments from the March 2010 GMAP

Identify & Gather Data on Chemicals of Concern

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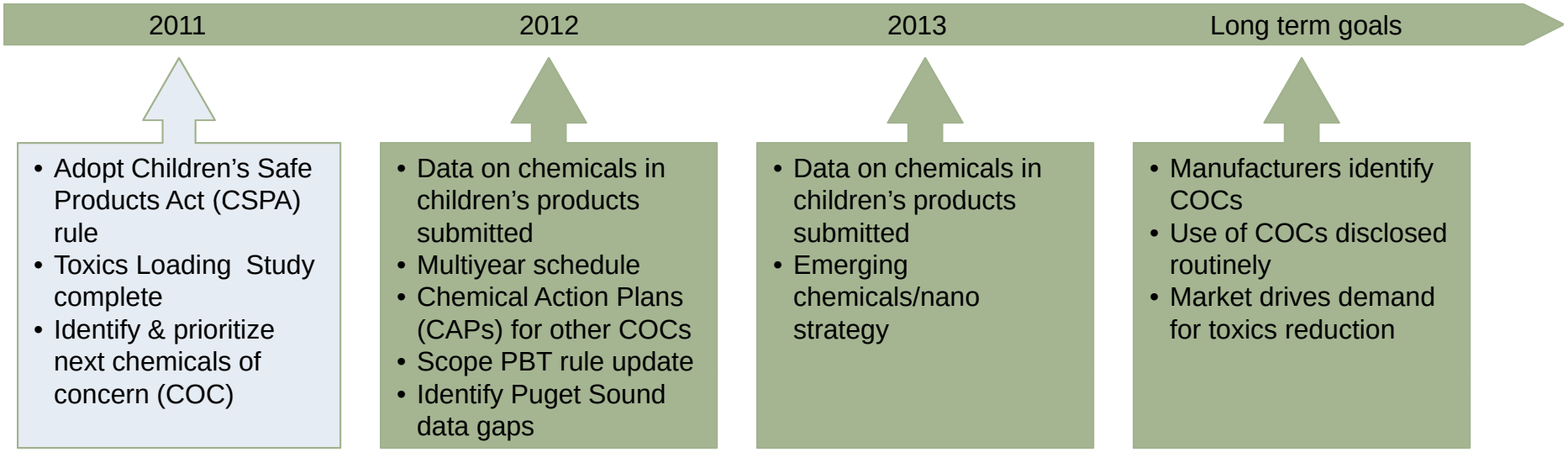

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
CSPA rule adopted	John Williams	March 2011	On track
Toxics Loading Study – source control & synthesis report	EAP	Spring 2011	Opportunity for science-based decision making
Toxics Loading Study – identify near-term actions	ToxPol	Fall 2011	Challenge: data gaps
Develop product testing protocols	EAP/ Josh Grice	Spring 2011	New business for Ecology
Database for CSPA	John Williams	Spring 2012	Focus on screening tools & PBDEs; Limited benefit from Interstate Chemical Clearinghouse coordination

Performance Measures	Incorporation of CSPA chemicals into business Restricted Substances Lists (RSLs) Completion of CSPA database

Continue Persistent Bioaccumulative Toxins (PBT) Phase Out

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2011

- Include lead poisoning environmental investigations as Site Hazard Assessment (SHA) eligible expense
- Build support for Lead CAP key recommendations
- Complete PAH CAP

2012

- Implement key recommendations on lead-based paint
- Polycyclic aromatic hydrocarbons (PAH) CAP implementation

2013

- Mercury lamp product stewardship program in place
- PFOS CAP completion
- Update PBT Rule, if needed
- New multiyear CAP schedule

Long term goals

- Jan 2020 - Recycle all end-of-life mercury-containing lights
- Introduction of new PBTs does not occur

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Compliance with Jan. 2011 bans on lead wheel weights and PBDEs in consumer products	Josh Grice	Ongoing	New sampling methodologies
Build support and develop a funding strategy for the key recommendation of the Lead CAP to reduce children's exposure to lead-based paint.	Holly Davies	Fall 2011	Lead poisoning and lead paint authorities are in other agencies.
Complete PAH (polycyclic aromatic hydrocarbons) CAP and make recommendations	Holly Davies	Summer 2011	Reduction of non-point sources
Identify actions to reduce PBTs in Puget Sound	Holly Davies	Spring 2011	Part of Toxics Loading Study
Collect fees from mercury-containing light producers to fund staff positions	Kara Steward	Jan 2011	Producers may not pay invoice, enforcement of the law occurs Jan 2013

Performance Measures	Collection of residential mercury-containing lights through the product stewardship program Reduced childhood blood lead levels Reduced environmental levels of PBTs

“Toxic Metals Prevention”—Technical Assistance for PBTs

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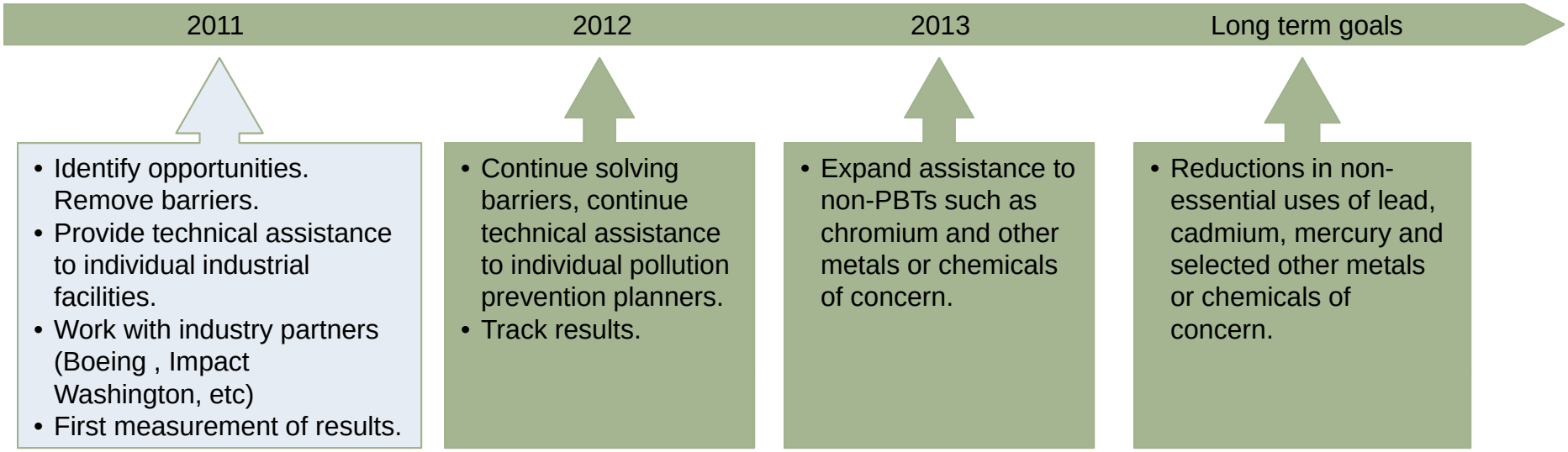

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Form team, set goals for technical assistance to 300 businesses using lead, cadmium and mercury. Launched project with letter to businesses.	Tom Boucher (TB)	Apr. 2010	Positive responses. Early results: $200K investment in production line to make fishing equipment; wire maker in early stages of change away from lead.
Comprehensive site-specific analysis of technical assistance opportunities. Start of visits to individual businesses.	Regional toxics reduction staff	Winter 2010, throughout 2011.	Opportunity: More consistent facility knowledge of best management practices; EPA support. Challenges: Diverse technical research problems to prioritize; lack of incentives for change.
Work with industry partners (Boeing , Impact Washington, trade associations)	TB, Ken Zarker, regional staff	2011	Collaborative education of Boeing suppliers on less toxic methods; access to Boeing pollution prevention web site; Green Screen training.

Performance Measures	Reduction In use of hazardous materials.

Strategy: Spur Development of Safer Alternatives

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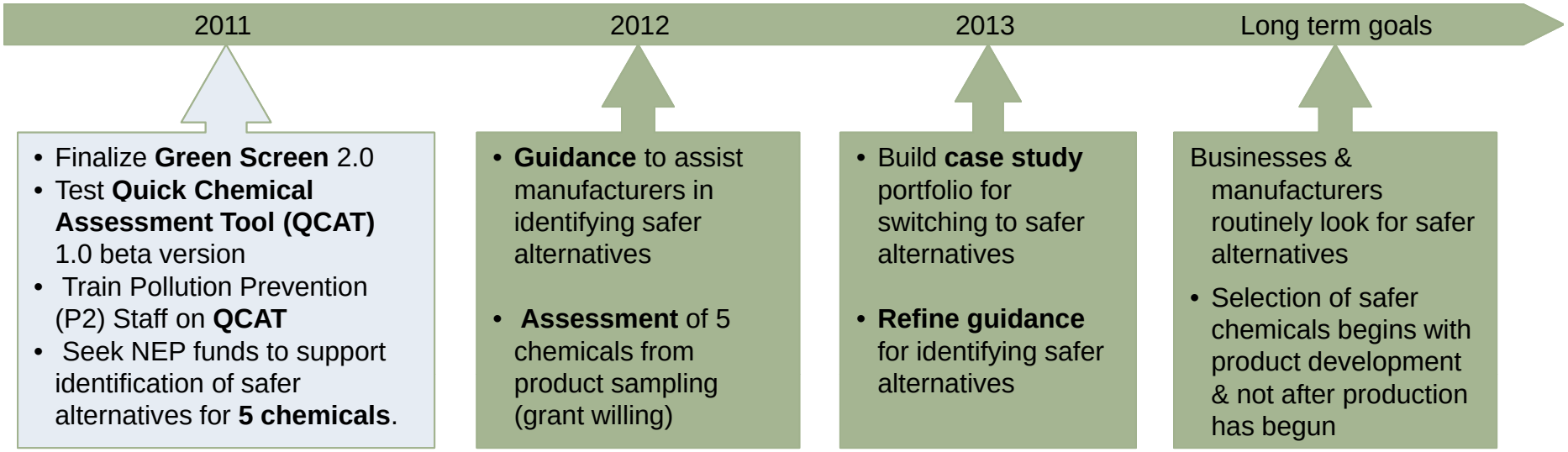

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Complete Green Screen Version 2.0	Alex Stone (AS)	April 2011	Ecology input complete (Aug 2010), awaiting Clean Product Action (CPA) finalization.
Train businesses on Green Screen Version 2.0	AS, Ken Zarker, CPA	Nov 2010/ 2011	Training taking place in Seattle on Nov. 30th Additional training in 2011.
Train P2 staff on Ecology Quick Chemical Assessment Tool (QCAT)	AS, Tom Boucher	Feb 2011	To facilitate alternative assessments in small & medium businesses. Implementation ongoing.
Enforce Toxics in Packaging legislation	AS	Ongoing	Work with member states to address issues such as lead in reusable bags, packaging, etc.
Seek NEP funding for product sampling and Safer Chemical Alternative Assessment	Ken Zarker, AS	May 2011	Initial request rejected, will resubmit in next round.

Performance Measures	Completed training for businesses on Green Screen and P2 staff on QCAT, finalize Green Screen 2.0, complete NEP grant request, continued toxics in packaging enforcement

Incentives for Green Chemistry Adoption

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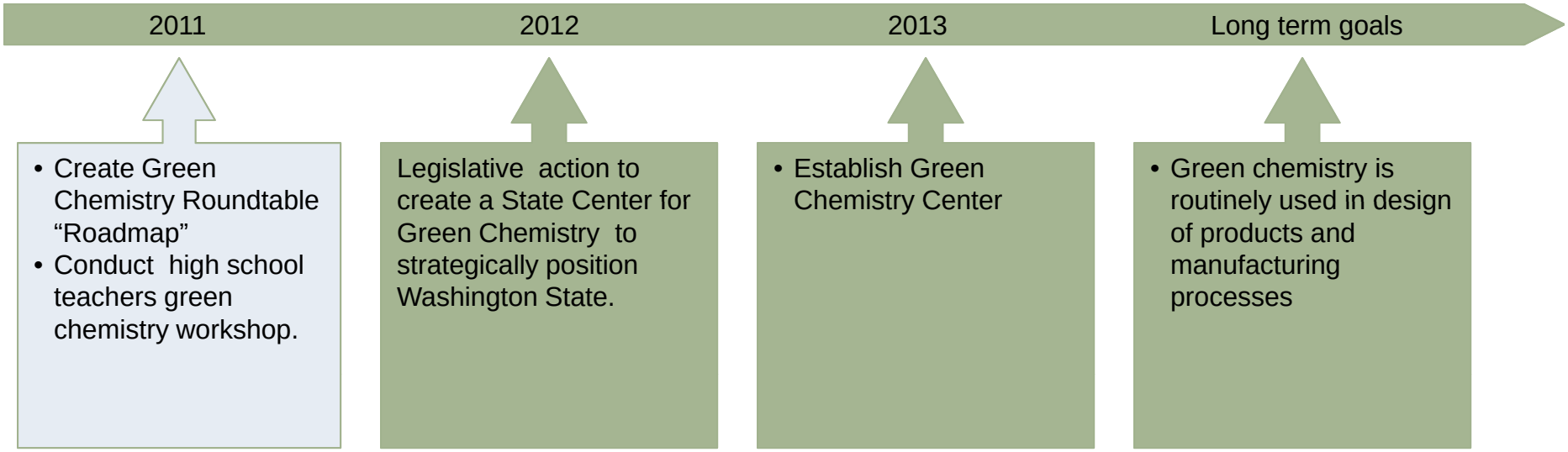
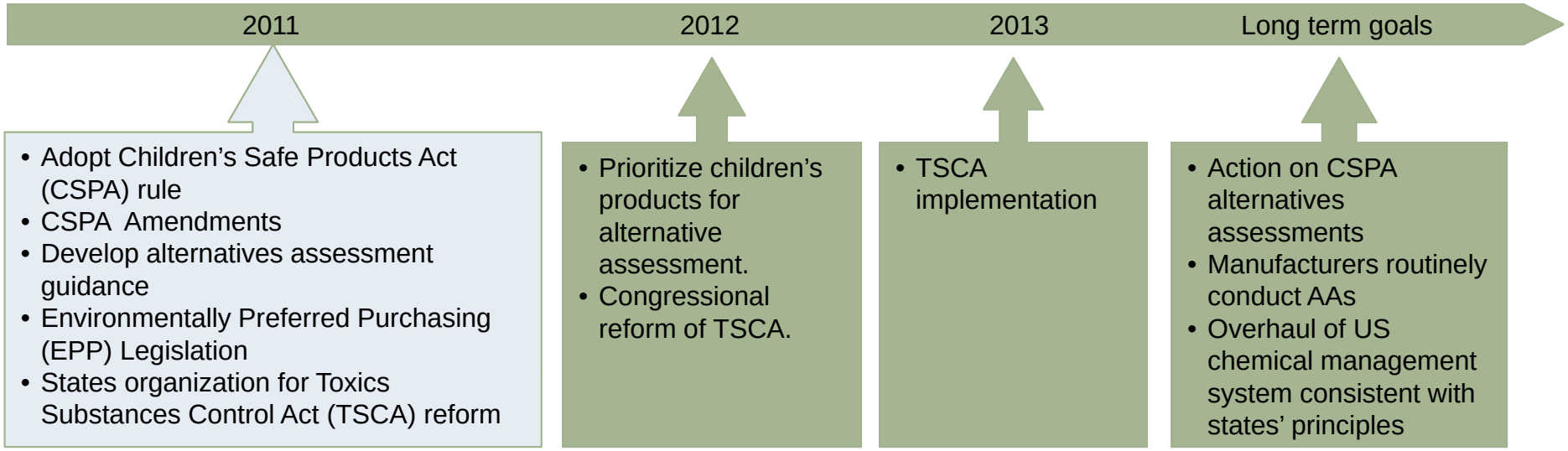


CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Green Chemistry Roundtable: Conduct quarterly meetings to engage business, academia and government to advance green chemistry as integral to the green economy.	Ken Zarker	August 2011	Seeking funding and business support to draft a state "roadmap" to inform policy makers prior to next session. Seeking legislative support to establish a green chemistry program in WA.
Green Chemistry Workshops: Hold middle school and high school workshop for 40 teachers in partnership with WA Environmental Education Association & Beyond Benign Foundation.	Ken Zarker	July 2011	Seeking $25k in private sector funding to cover teacher costs to attend the workshops.

Performance Measures	Pounds of toxics reduced through green chemistry implementation. Number of students trained in green chemistry education.

Enhance Prevention Tools



CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Pass amendments to Children's Safe Product Act. Develop alternatives assessment guidance.	Carol Kraege	Spring 2011	Stakeholder concerns, diversion of existing resources.
Pass Environmentally Preferable Purchasing legislation.	Darin Rice	Spring 2011	
Diesel regulations addressing private sector engines started	Green	Summer 2011	Economic downturn Fuel savings opportunities for industry
States Voice for TSCA Reform: Establish states organization to monitor and participate in TSCA reform.	Ken Zarker	Spring 2011	Seeking funding to hire staff to coordinate leadership states working on TSCA reform. Uncertainty about direction of reform.

Performance Measures	Number of chemicals of high concern to children replaced with safer alternatives. Tons of diesel emissions reduced

Revised National Ambient Air Quality Standards

	Lead*	NO2*	SO2*	Ozone	CO	PM2.5
Final Rules	Oct 2008	Jan 2010	Jun 2010	Dec 2010	May 2011	Oct 2011

- Unprecedented workload
- Complete set of EPA standards tightened at one time
- Driven by large public health impacts

- Of Most Concern in WA: Fine Particles and Ozone
- Of Concern in WA: Sulfur Dioxide and Nitrogen Dioxide

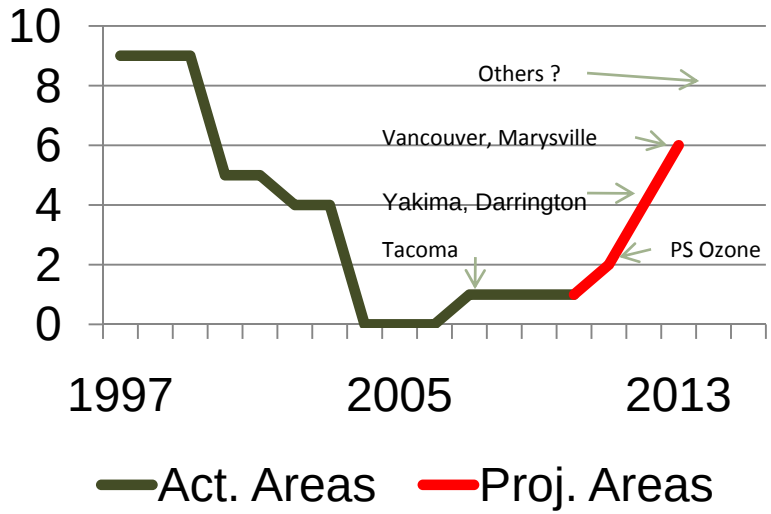
- *New monitoring requirements without new funding

Nonattainment Schedule

- Year one: Designate areas that violate the new standard.
- Year four: Complete plan containing legally enforceable strategies that solve the problem. (Sanctions apply for not completing or implementing the plan)
- Year six. Areas must meet the standard.

- If successful, must develop 10-year maintenance plan to assure compliance.
- If not successful, new strategies must be implemented to achieve further air pollution reductions.

Number of WA Nonattainment Areas



Challenges

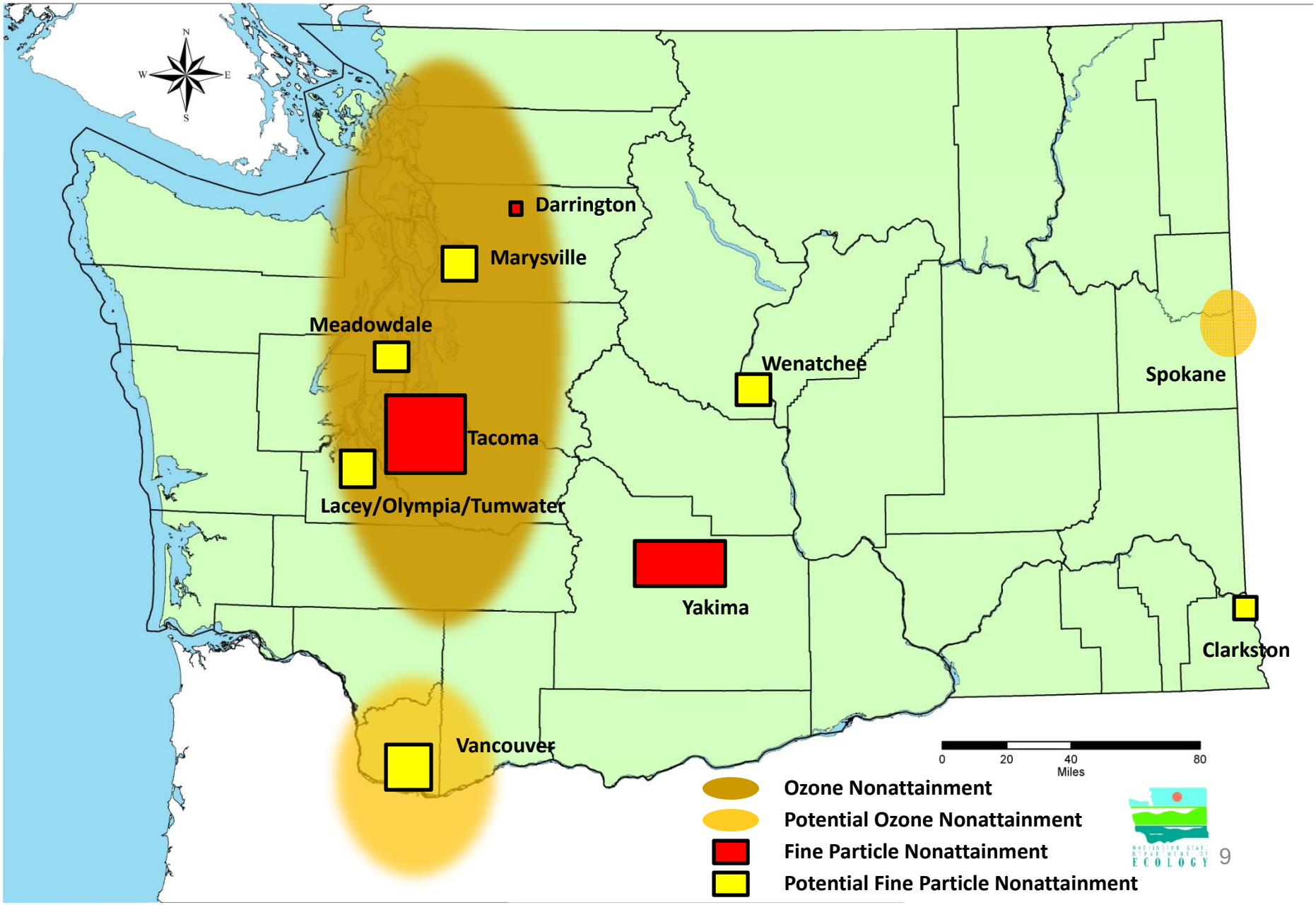
Economic Consequences of Nonattainment

- High public health and health-care consequences
- Clean Air Act intentionally limits economic growth
- Severe financial sanctions on the state for failure
- Ozone and PM are caused by individual choices – will make this much more difficult to solve.

Program Capacity

- 1/3 fewer staff than last time we faced this problem.
- Need broad cadre of analysis, planning, regulatory, communication, and managerial expertise to be successful.

Expected & Potential Nonattainment Areas



Nonattainment and State Implementation Plan Work

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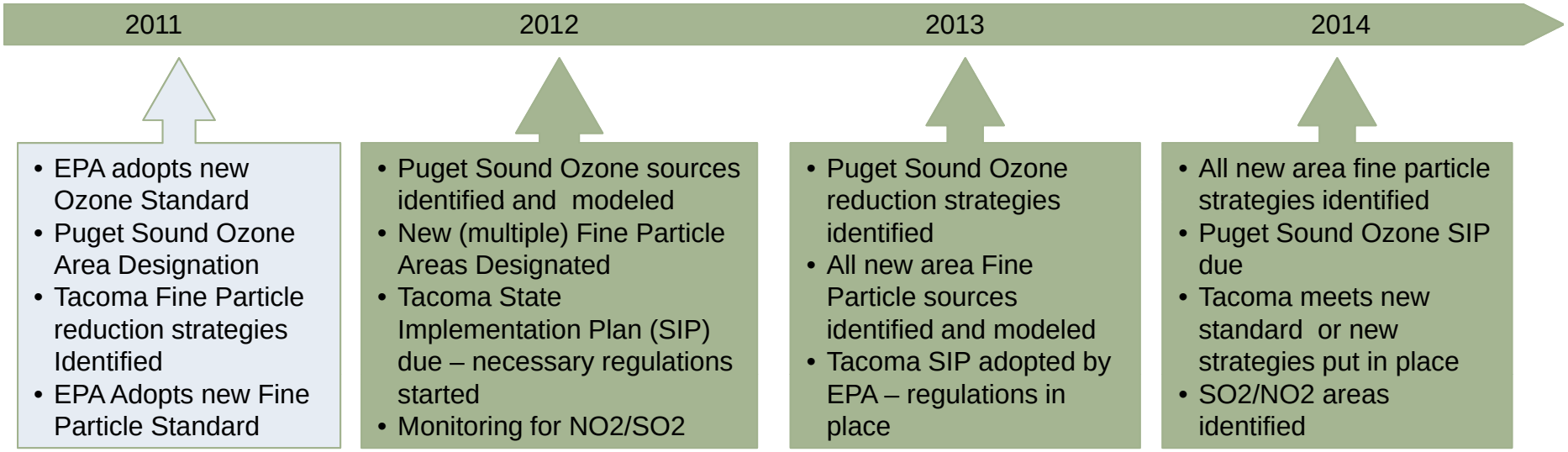

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Woodstove Policy and Budget Legislation Adopted	Taylor Clark	5/2011	Challenging industry opposition Funding required for public education and enforcement
Necessary staffing secured	Clark Taylor	6/2011	Challenging budget environment Opportunity for health impact messaging
Puget Sound Ozone Area Designated	Clark Green	Summer 2011	Political issues over boundary setting Ozone is principally a transportation issue
Diesel Regulation started	Green	Summer 2011	Economic downturn Fuel savings opportunities for industry

Performance Measures	Number of Nonattainment Areas in Washington : going from 1 to 4 or more Number of woodstoves Changed out: approaching 2,000 units, not moving the monitors Number of diesel engines retrofitted: 12,000 retrofits on 9,000 engines, need private sector

Control of Toxics in Stormwater (SW)

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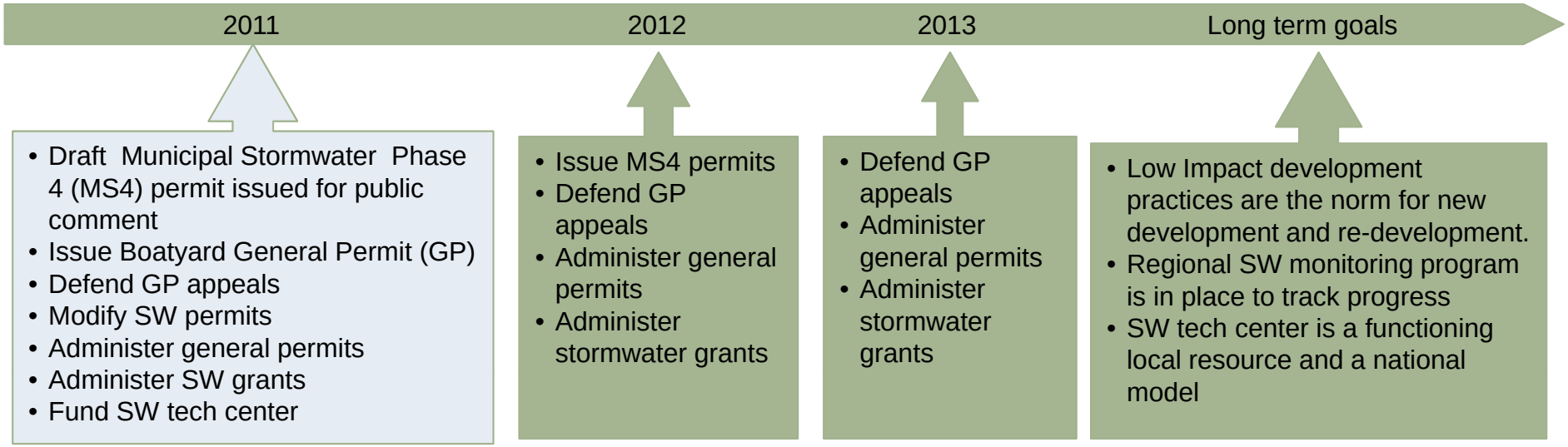

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Preliminary drafts of MS4 permit language for LID and monitoring	Bill Moore	4/2011	Lots of policy, administrative and technical details that still need to be worked out
Draft MS4 permits out for public comment	Bill Moore	10/2011	Pressure continues to build for a delay in the re-issuance of the municipal stormwater permits.
Complete stormwater retrofit and Low Impact Development (LID) grant agreements	Steve Carley	7/2011	The staff necessary to fully administer this new stormwater grant program have not been hired.
Develop and implement a strategy for funding the Stormwater Technical Resource Center and new stormwater technology reviews (TAP-E)	Bill Moore	6/2011	Base level of funding is necessary to keep both the SW Technical Resource Center and TAP-E moving forward.

Performance Measures	WQ tracks the percentage of industrial stormwater facilities submitting discharge monitoring reports as required by permit. The current rate is 65%, FY11 target is 75%. Starting in July, 2010, we began tracking % of inspected Industrial SW GP facilities in compliance per quarter, for Puget Sound GMAP. For Jul-Sep, 37% were in compliance.

National Estuary Program (NEP) Toxics and Nutrient Grant

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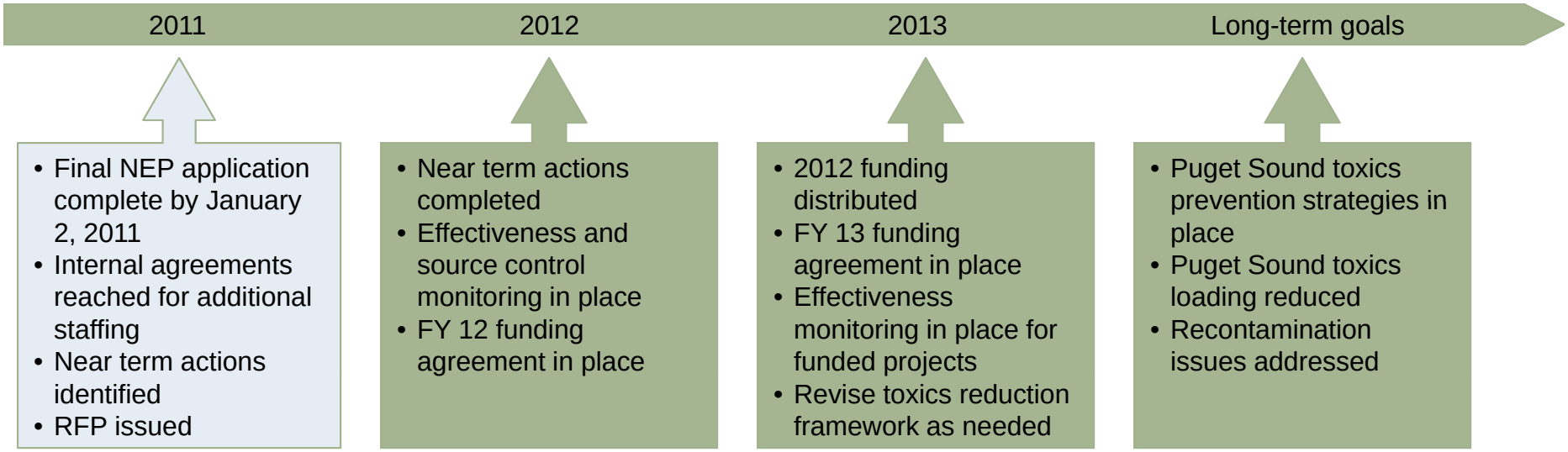

CRITICAL 2011 MILESTONES	WHO	WHEN	CHALLENGES & OPPORTUNITIES
Complete final application for NEP toxics and nutrient award	Warfield/ Kolosseus	January, 2011	Challenging time frame
Secure additional staffing to support the grant	WQ/EAP/ W2R	March, 2011	Hiring constraints
Identify near term actions for reducing toxics in Puget Sound and fund asap	ToxPol	Spring, 2011	Challenging time frame to put the money to effective use.
Complete toxics reduction framework for Puget Sound (PS).	ToxPol	Spring, 2011	Very high expectations for the Toxics Loading Study
FY 11 NEP funding agreement Issue RFP for toxics reduction activities in PS	WQ/EAP/ W2R	Summer 2011	Short time frame to put the money to use, lose credibility if near term actions are not completed

Performance Measures	Effectiveness monitoring for actions taken Funds deployed