

Project Elements –

Assessing and addressing cumulative impacts and precautionary approaches

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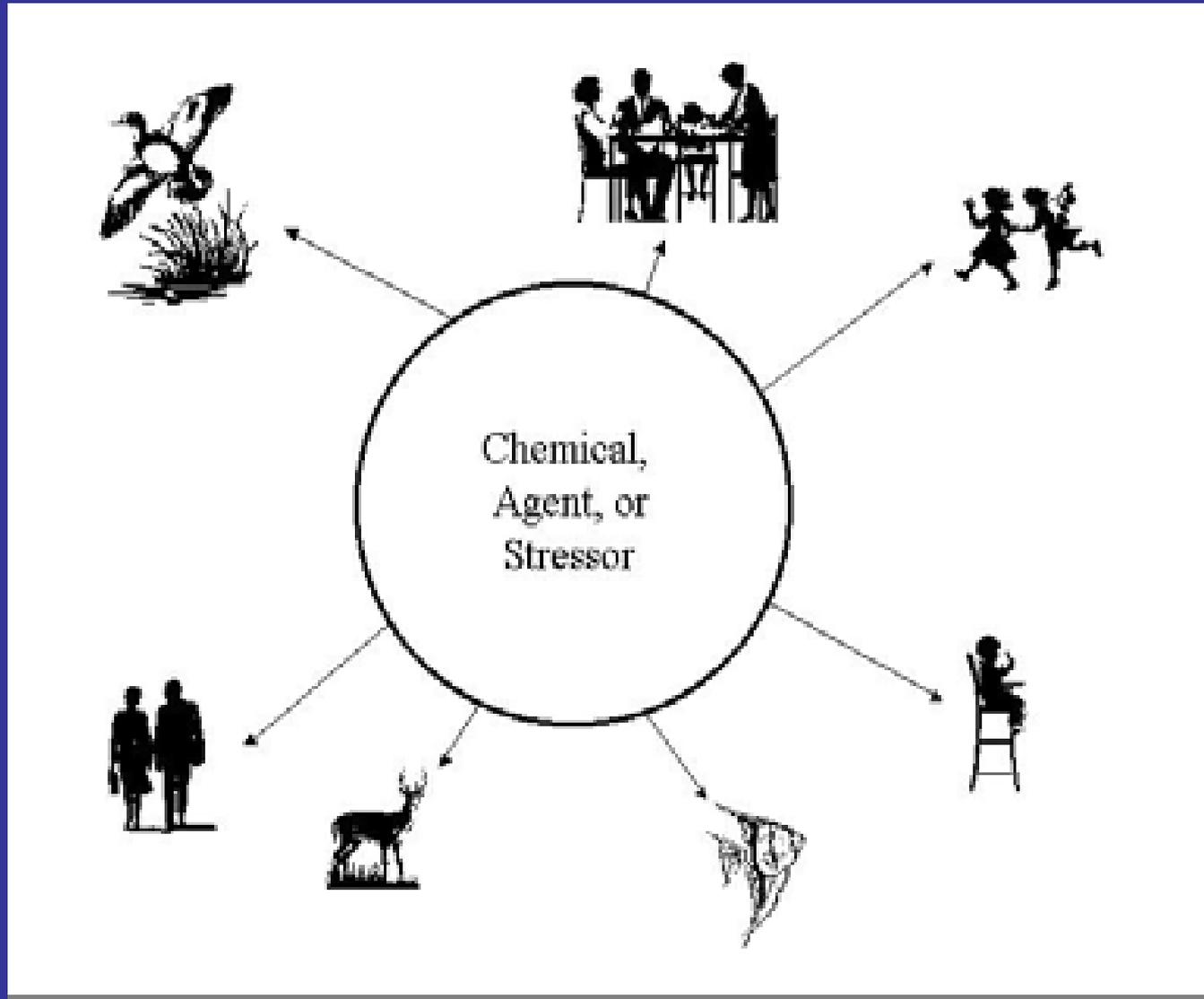
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Preview

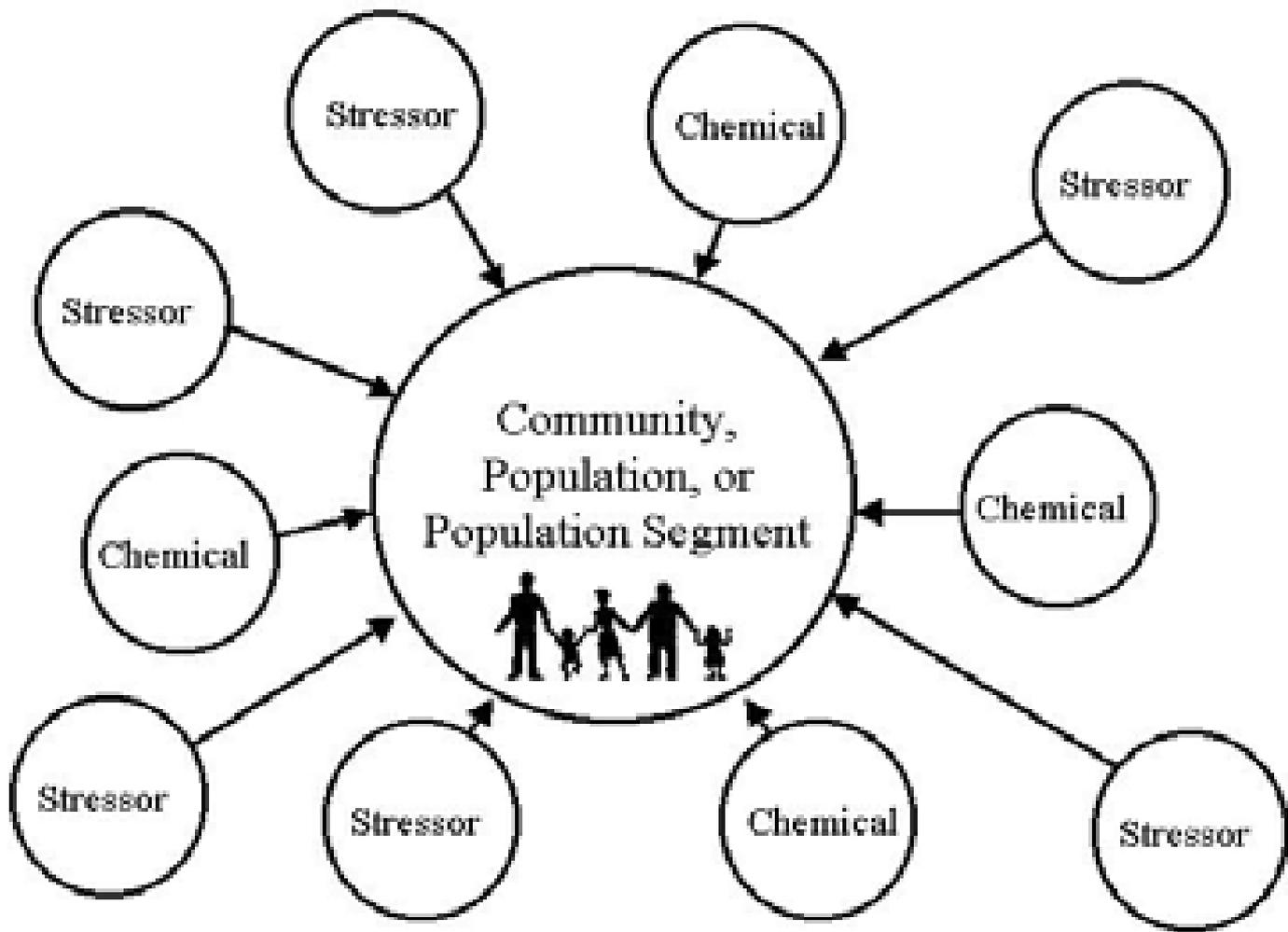
- Nature of this task
- Approach
- Project elements and responsibilities
 - UC
 - Cal EPA / OEHHA project staff
 - Work group
 - Cal EPA / Boards and Departments
- Discussion

Change focus: from “single agent or stressor”





Change focus: to what happens in communities



Approach

- Look at charge and definitions
- Review what has been done
- New work -> project elements
- Framework

- Cal EPA guidance

Approach

- Look at charge and definitions
 - Review what has been done
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Working definitions

Cumulative impacts means exposures, public health or environmental effects

from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources

Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available.

Working definitions

Precautionary approach means taking anticipatory action to protect public health or the environment if a reasonable threat of serious harm exists based upon the best available science and other relevant information, even if absolute and undisputed scientific evidence is not available to assess the exact nature and extent of risk.

Many environmental factors

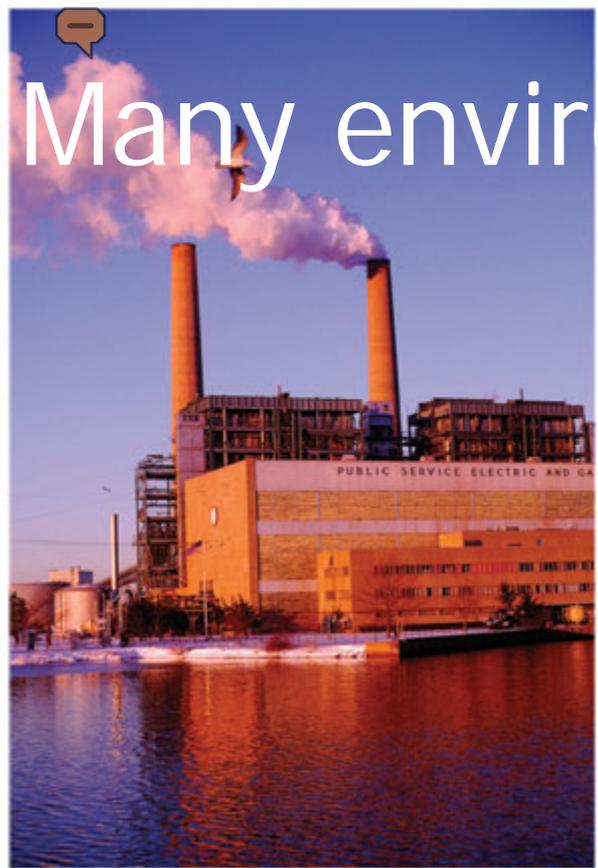
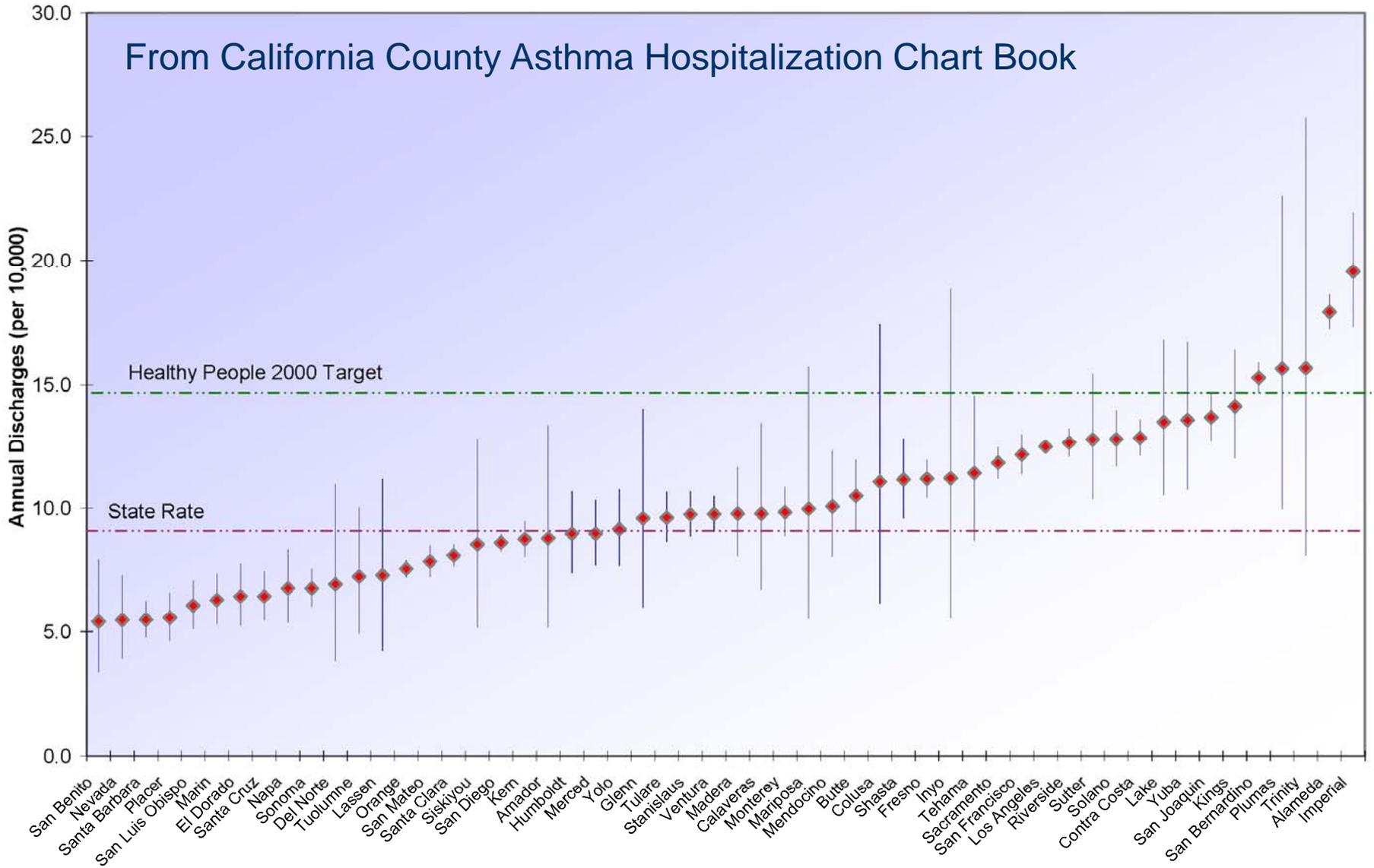




Figure 2: Age-Adjusted* Asthma Hospital Discharge Rates for All Races by County, 1998-2000, with 95% Confidence Intervals.



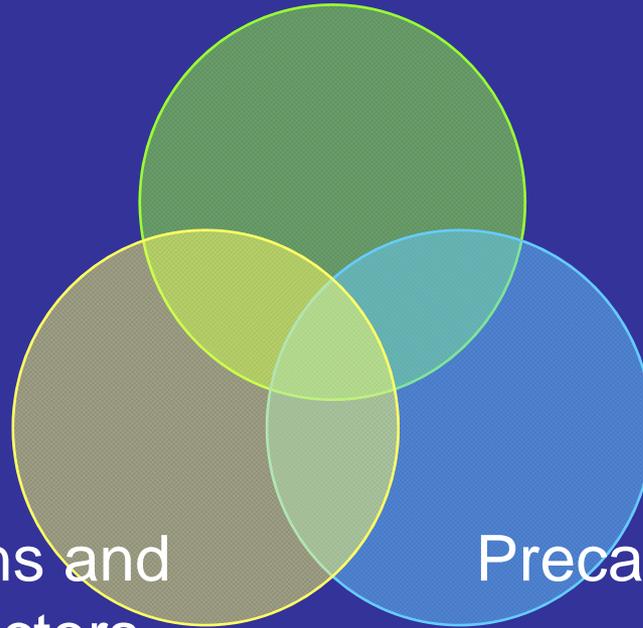
*Age-adjusted to the 2000 U.S. population. Counties with less than 30 cases not shown.

Both are related to other factors

- Susceptibility
- Vulnerability
- Health status
- Well being
- Resources
- Resiliency



Combined impacts –
multiple factors

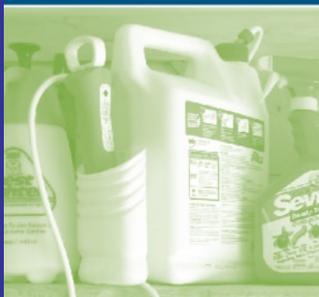


Sensitive populations and
socio economic factors

Precautionary approaches
to decisions



A Community Guide to Recognizing & Reporting Pesticide Problems





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FOR IMMEDIATE RELEASE
May 22, 2008

Leo Kay
(916) 849-9843
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ARB approves Valley particulate matter plan

State adds several contingency measures to make sure health standards are met

SACRAMENTO - The Air Resources Board today approved a particulate matter pollution control plan for the San Joaquin Valley that will meet federal health standards by the 2014 deadline.

Though the proposed plan had met all legal and technical requirements under the federal Clean Air Act, the Board directed the San Joaquin Valley Air Pollution Control District to add a number of contingency measures today to strengthen its regulations on fireplaces, boilers, and industrial engines.

Local measures such as a strong residential wood smoke rule and one of the state's toughest regulations on boilers and glass furnaces will combine with ARB's recently passed off-road construction rule and the upcoming proposed truck regulation to allow the Valley to meet federal fine particulate matter standards by 2014. Parts of the Valley already comply with the particulate matter standard, with southern regions suffering from the worst air quality.



Linda S. Adams
*Secretary for
Environmental Protection*

State Water Resources Control Board

Division of Water Quality

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Arnold Schwarzenegger
Governor

NOTICE OF OPPORTUNITY FOR PUBLIC COMMENT ON THE CALIFORNIA DEPARTMENT OF TRANSPORTATION'S STORM WATER MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN THAT the State Water Resources Control Board (State Water Board) will now accept comments on the proposed revised Storm Water Management Plan (SWMP) submitted by the California Department of Transportation (Caltrans) on June 29, 2007. The proposed revised SWMP describes Caltrans' plans for implementing the requirements of its statewide National Pollutant Discharge Elimination System (NPDES) storm water permit ([Order No. 99-06-DWQ](#)). The proposed SWMP is available on the State Water Board's Web site at: <http://www.waterboards.ca.gov/stormwtr/caltrans.html>.

State Water Board staff is currently preparing Caltrans' NPDES storm water permit for reissuance. Notice of a draft NPDES permit will be provided separately. The State Water Board expects to consider the draft NPDES permit at a future meeting in 2008. Notice for that meeting will be published separately.



For Immediate Release
May 20, 2008
2008-Release 28

For more information contact:
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State Grants Help Promote Motor Oil Recycling Programs: Funds will enhance reuse of used oil products, target illegal disposal practices

SACRAMENTO--The California Integrated Waste Management Board approved more than \$1.2 million in [grants](#) from the Used Oil Opportunity Grant Program and Used Oil Nonprofit Grant Program to allow California cities and counties to enhance overall used oil and used oil filter collection and recycling programs, as well as to consider using re-refined oil in their fleet vehicles.

"Improper disposal of used motor oil poses a great risk to the environment, as well as the health and safety of our residents," said Board Chair Margo Reid Brown. "These grants will increase used oil recycling and reduce improper disposal practices."

These projects will help boost the amount of used oil that is recycled yearly. Of the nearly 153 million gallons of used oil generated annually in California, only 59 percent is now being recycled.

Used oil is very recyclable and can be re-refined or processed into fuel oil. Unfortunately, not enough is being recycled. In 2006, 153 million gallons of lubricating oil were sold in California. Approximately 33 percent, or 50 million gallons, leaked out of engines or was burned. Yet, of the remaining 102 million gallons, just 88 million gallons were recycled, leaving approximately 14 million gallons unaccounted for and possibly improperly disposed of down storm drains, into lakes or streams, or into the garbage.

The Board's Used Oil competitive grant program is designed to provide resources to explore new program activities and/or to transfer proven program ideas and best practices to a larger pool of communities in order to enhance overall used oil, and oil filter collection and recycling. Competitive grants can spur innovation, which may later be covered by local "Block Grant" used oil and filter collection programs.

The Board approved grants today to the following organizations:

2007/2008 Used Oil Opportunity Grants (OG9)		
Applicant	Funds Awarded	Project Summary
Fremont	\$ 86,123.00	Program Priority Criteria: Targeted Do It Yourself (DIY) Collection and Oil Filter Collection Will expand oil filter and used motor oil collection by partnering with the new permanent household hazardous waste facility in Fremont. This program will target the DIY population and provide outreach materials to all Fremont residents.
City of Los Angeles	\$150,000.00	Program Priority Criteria: Targeted DIY Collection and Oil Filter Collection Will construct and establish five additional permanent marina oil recovery facilities. Implement a

Key aspects

- Two areas to address:
 - Cumulative impacts
 - Precautionary approaches
- Two kinds of considerations
 - Analytic
 - Policy

Approach

- Look at charge and definitions
- Review what has been done
- New work -> project elements
- Framework

What has been done

- Guidance for decisions and analysis
- Plans for land use
- Theoretical frameworks
- Tools
- Limited examples (narrow)



AIR QUALITY AND LAND USE HANDBOOK: A COMMUNITY HEALTH PERSPECTIVE



April 2005

California Environmental Protection Agency
California Air Resources Board

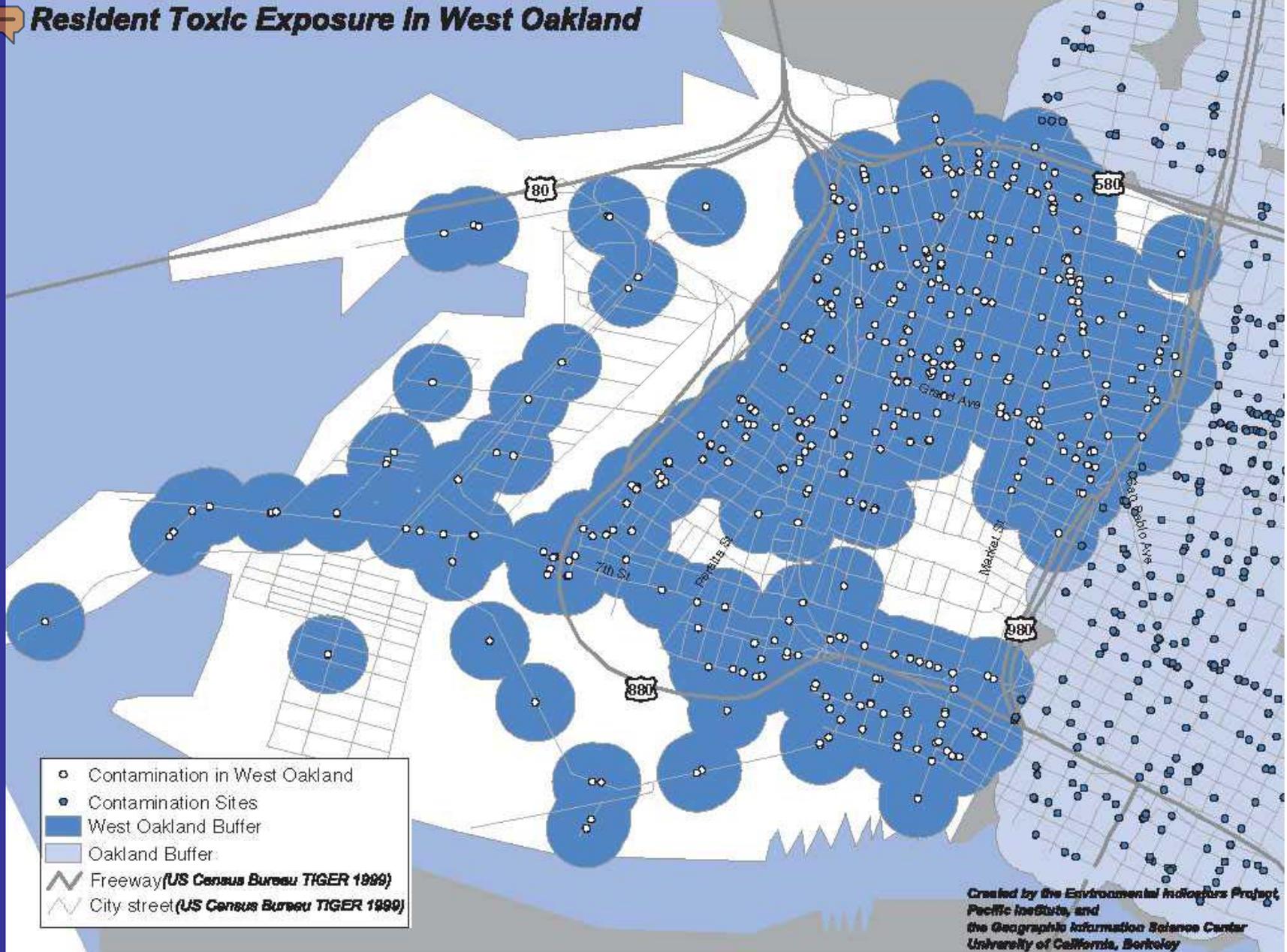




Agencia de Protección Ambiental del Estado de California

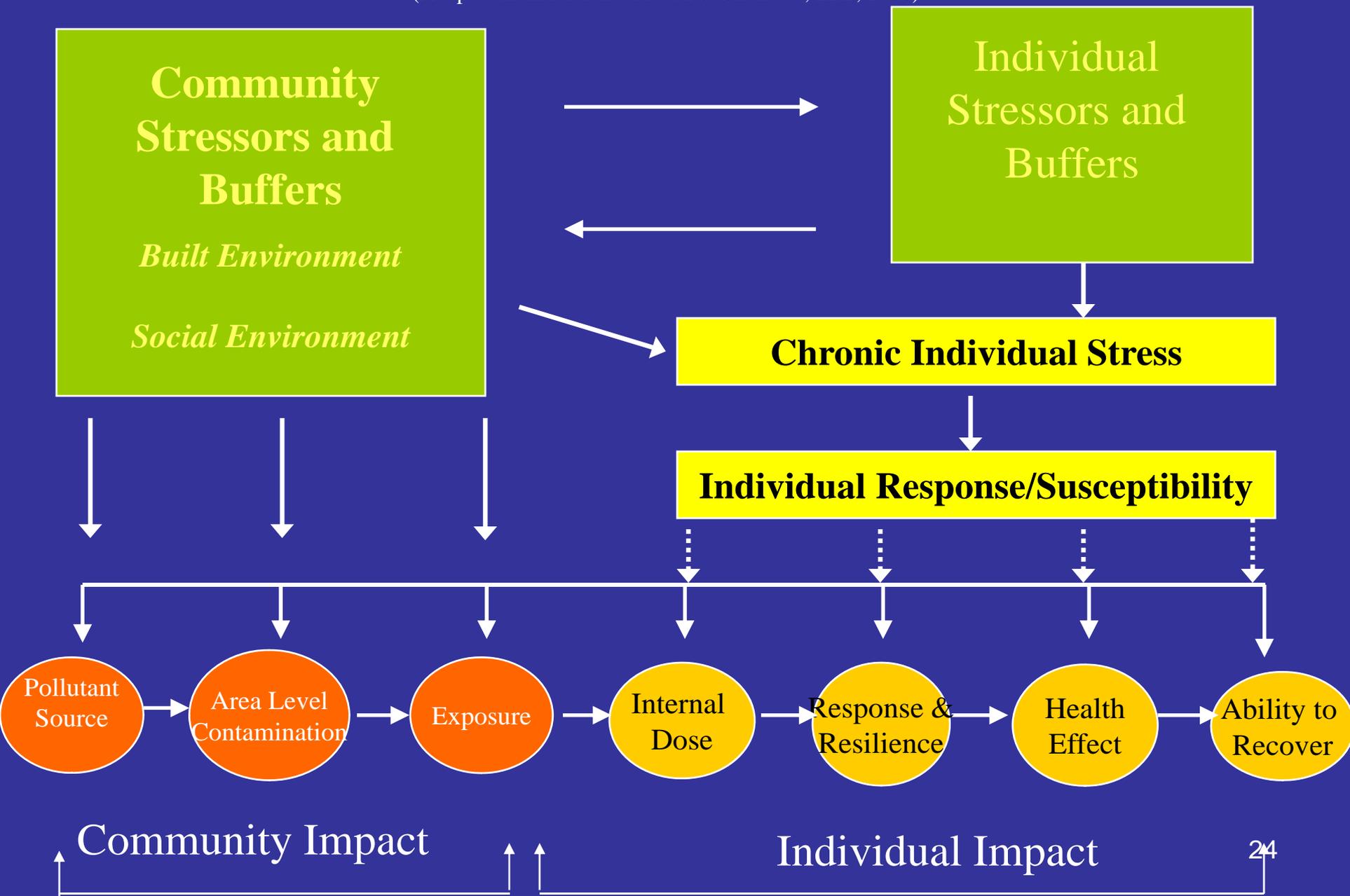
**OCTUBRE 2004
PLAN DE ACCIÓN DE
JUSTICIA AMBIENTAL**

Resident Toxic Exposure In West Oakland



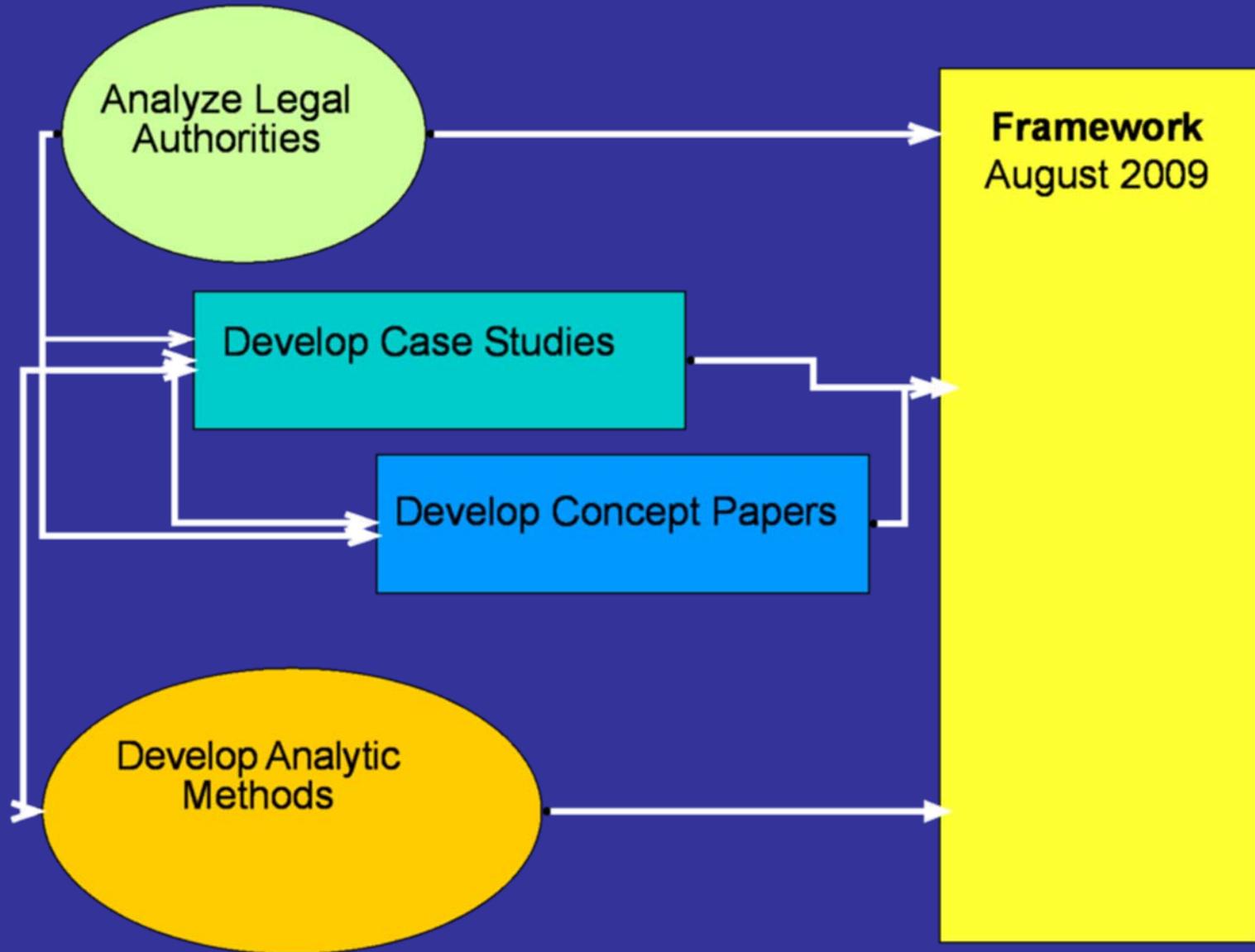
Cumulative Impact: Putting the Pieces Together

(Adapted from Morello-Frosch & Shenassa, EHP, 2006)



Approach

- Look at charge and definitions
- Review what has been done
- New work -> project elements
- Framework with recommendations



New work - project elements

1. Review of existing authorities (OEHHA for Cal EPA)
2. Case studies of decision contexts or topics (UCB)
3. Concept papers (UCB and UCR)
4. Analytic component (UCB)
5. Consultation (all)
 - with work group
 - with Boards and Departments
6. Organization of work group meetings (OEHHA)

1. Review of existing authorities

- OEHHA is lead on behalf of Cal EPA
- Work with the Boards and Departments
- Consider both cumulative impacts and precautionary approaches

➤ Briefing: Sept meeting

Elements for UC

2. Case studies (bottom up)
3. Concept papers (top down)
4. Analytic components
 - Review and development of data and methods
5. Consult with everyone!
 - Assist with group process design

2. Case studies

- Specific and tangible
- Drill down on issues for single case
- Raise issues to discuss more broadly → concept papers
- Seek advisors with direct knowledge

Case Studies: Components

- Decision context (legal and policy)
- Information, topics, data considered
- Analyses conducted
- How were cumulative impacts addressed?
- Could they have been under current authority?
- Other ways they might be

Case studies: Ideas (working list)

- Air toxics hot spot analyses
- Transportation related AQ impacts
- Port impacts
- School siting
- Refinery expansion
- Persistent, bioaccumulative pollutants
- Green chemistry
- Climate change
- Children (perhaps indoor environments)
- Rural California -> select place
- Urban neighborhood -> select place
- Development near asbestos site

3. Concept papers (UCB and UCR)

- Examine possible approaches and implications
 - Cumulative impacts (UCB)
 - Precautionary approaches (UCR)
- "top-down"
- Examine issues from case studies

Working Outline (Draft)

- Problem statement
 - Public health significance
 - Interface between precaution and CI
- Theories
 - Scientific, legal, policy, experiential
- Existing approaches
- Needs for development
 - what we need
- Findings
 - where we are
- Recommendations
 - what to do next and eventually

Ex: possible approaches

- Identify places for special attention or action
- Minimize accumulation of impacts in all decisions
- Develop concept of being over baseline
- Deal with impacts that come from other sectors

Ex: Varied, “qualitative” attributes

- “enough is enough”
- Indexing or scaling
- High-medium-low or percentiles
- Trends

4. Analytic elements (UCB)

- How to measure the many attributes
- How to understand relationships
- Develop and pilot methods
- Consider data sources

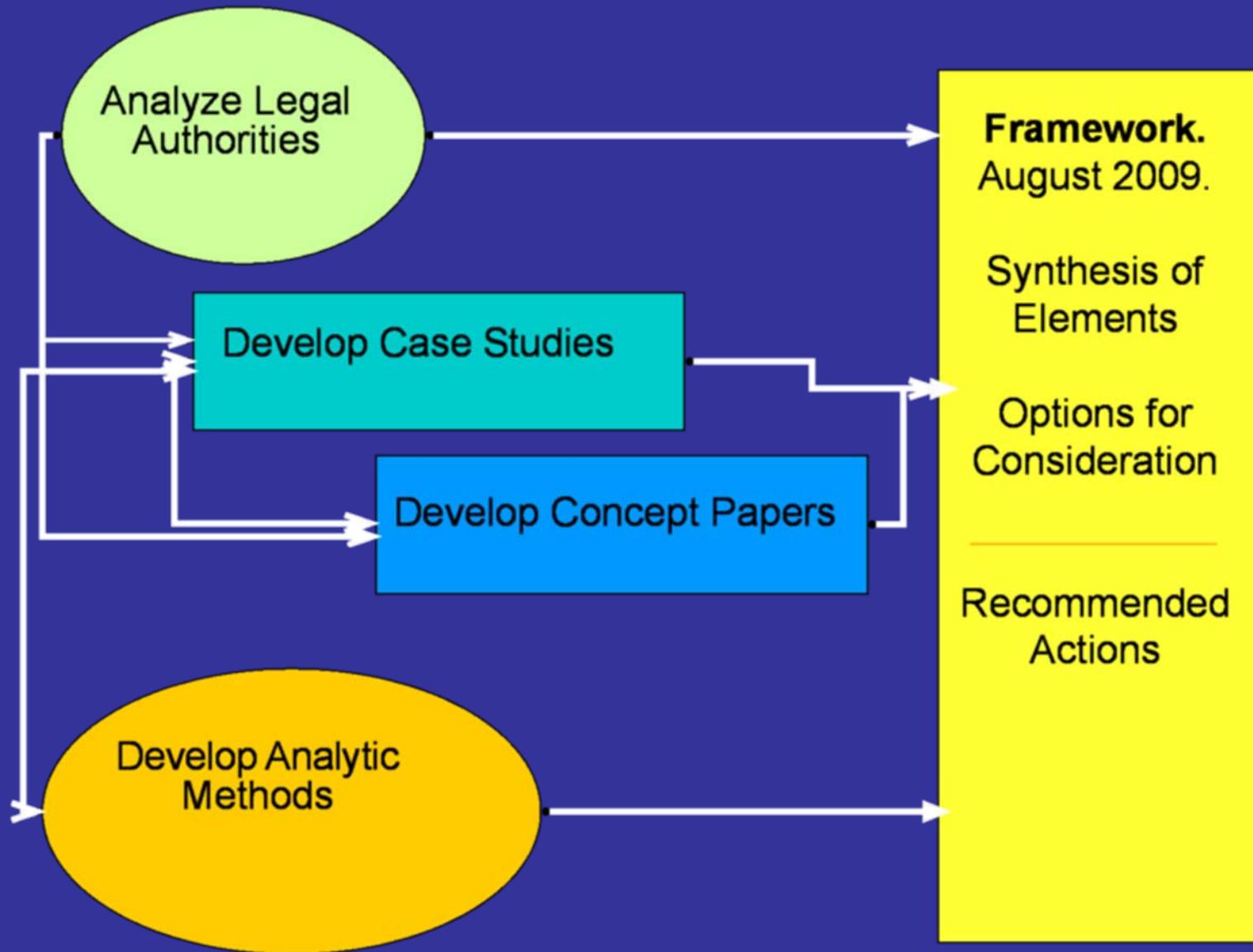
➤ Addressed in next presentation

5. Work group

- Review approaches and results
- Reflect diverse perspectives
- Provide suggestions at all phases
- UCB: Work on design of process to facilitate discussion and group learning

5. Cal EPA and its boards and departments

- Review approaches and results
 - Reflect diverse perspectives
 - Assist with review of legal authorities
 - Contribute to case studies
 - Provide suggestions at all phases
- Develop implementation portion



Thanks!

This presentation and related
information will be posted at
<http://cipa.berkeley.edu>

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