Endangered Species update

Presented to the Pesticide Program Dialogue Committee

May 9, 2007

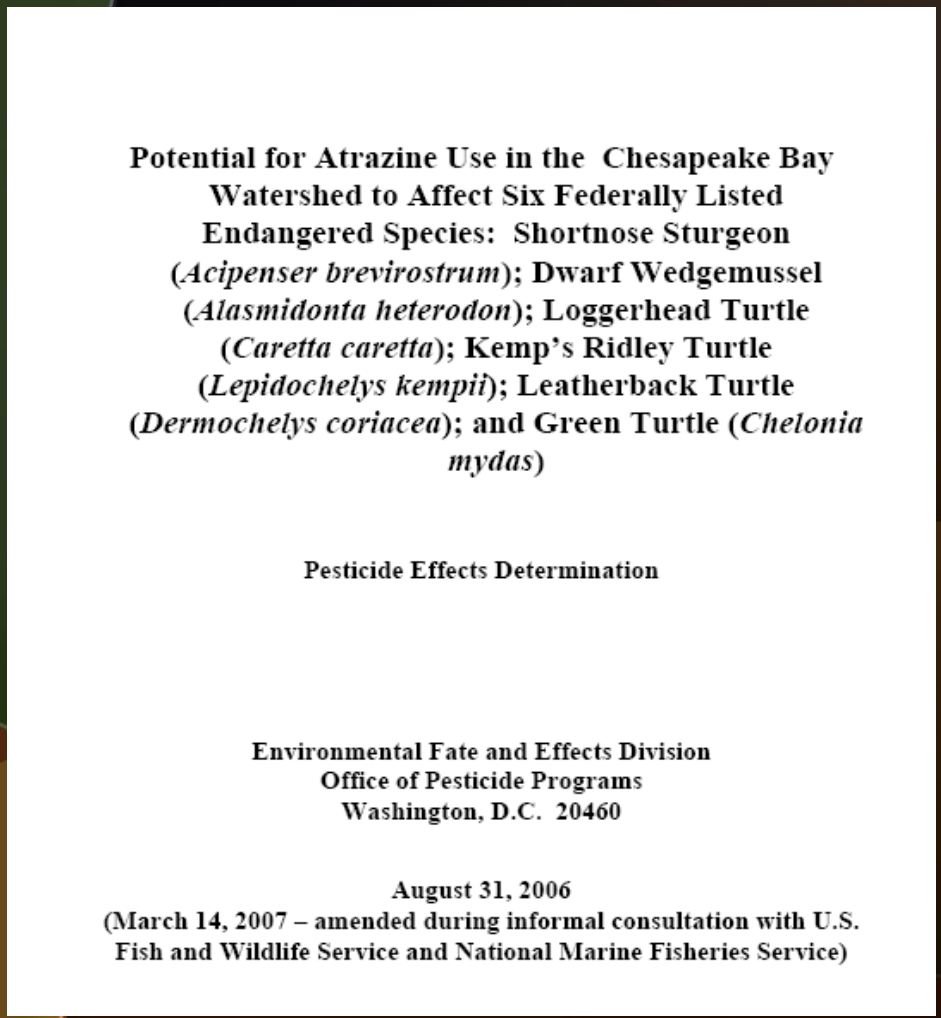
Topics

- **Litigation driven assessments**
- **Registration Review Program assessments**
- **Tool development**
- **Information management**

Litigation Driven Assessments

- **August ’06 – 7 aquatic species/atrazine**
- **August ’06 – Barton springs salamander/atrazine**
- **March ’07 – 8 mussels/atrazine**
- **May ’07 – Barton springs alamander/metolachlor**
- **May ’07 – Barton springs salamander/diazinon**

7 aquatic species/ atrazine



Potential for Atrazine Use in the Chesapeake Bay Watershed to Affect Six Federally Listed Endangered Species: Shortnose Sturgeon (*Acipenser brevirostrum*); Dwarf Wedgemussel (*Alasmidonta heterodon*); Loggerhead Turtle (*Caretta caretta*); Kemp's Ridley Turtle (*Lepidochelys kempii*); Leatherback Turtle (*Dermochelys coriacea*); and Green Turtle (*Chelonia mydas*)

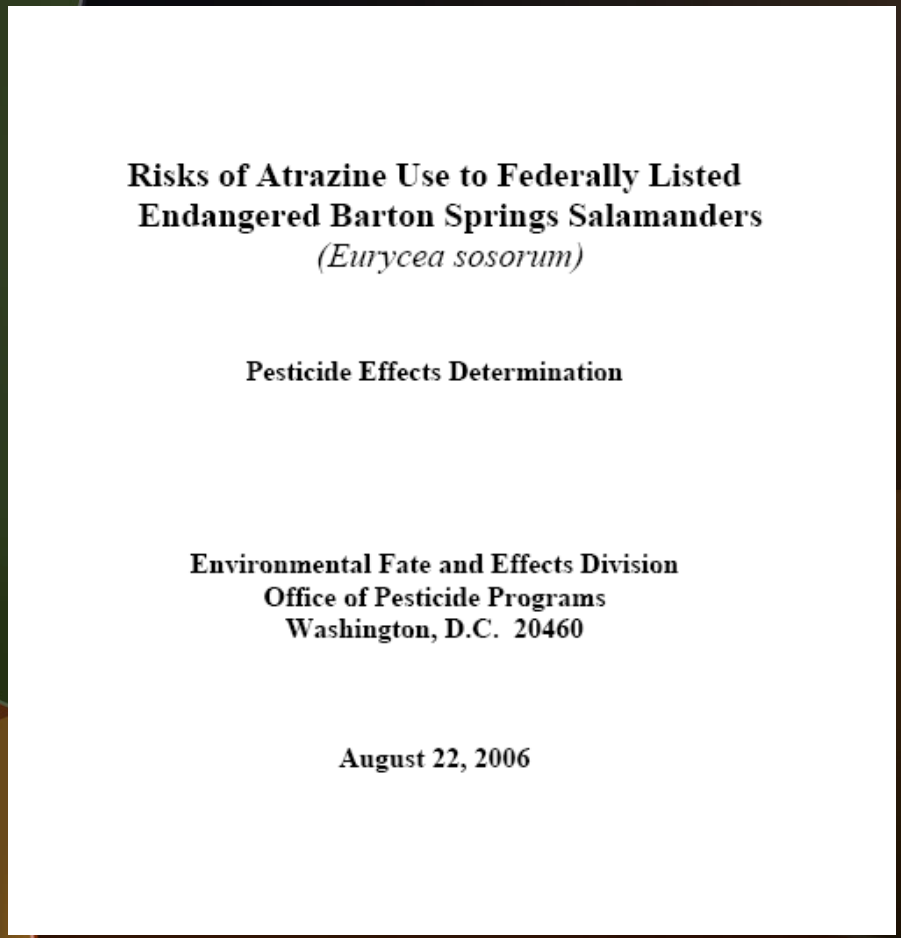
Pesticide Effects Determination

Environmental Fate and Effects Division
Office of Pesticide Programs
Washington, D.C. 20460

August 31, 2006
(March 14, 2007 – amended during informal consultation with U.S. Fish and Wildlife Service and National Marine Fisheries Service)

- **Not likely to adversely affect the species from use in the chesapeake bay and alabama river watersheds**
- **Currently engaged in Informal Consultation with NMFS and FWS**

Barton springs salamander/ atrazine



Risks of Atrazine Use to Federally Listed Endangered Barton Springs Salamanders
(Eurycea sosorum)

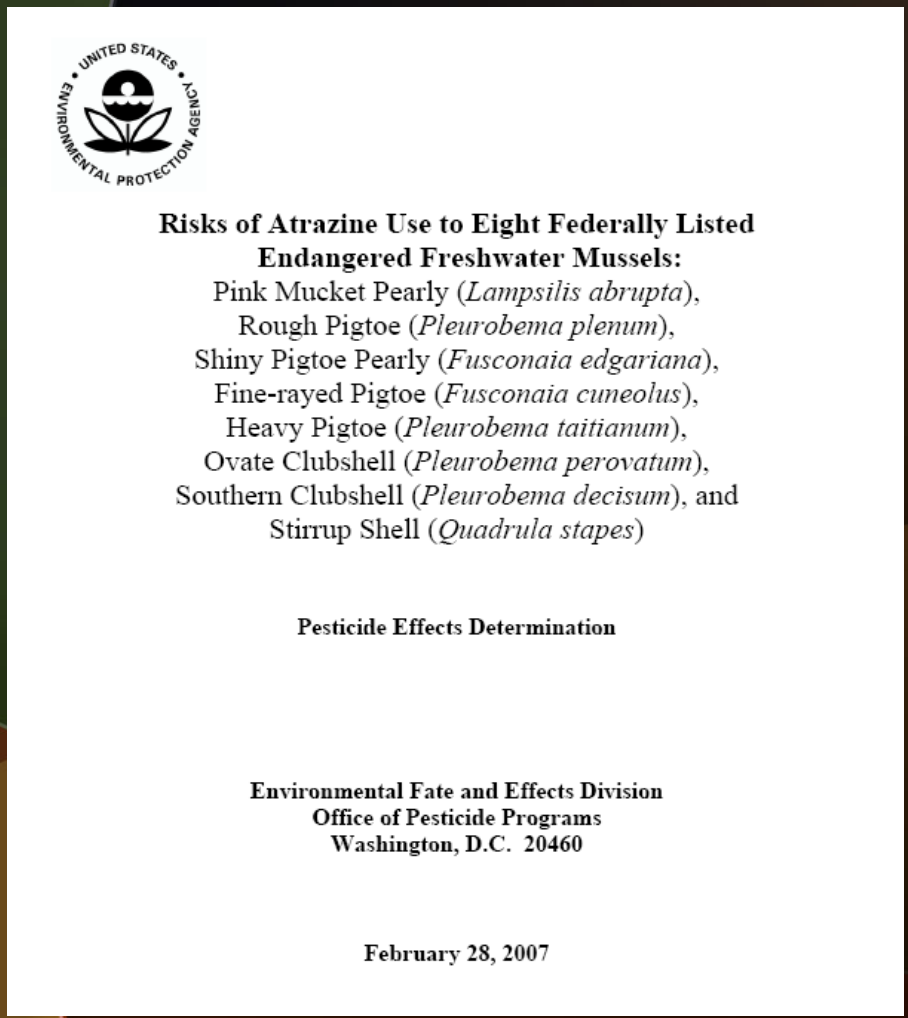
Pesticide Effects Determination

Environmental Fate and Effects Division
Office of Pesticide Programs
Washington, D.C. 20460

August 22, 2006

- **Not likely to adversely affect**
- **Currently in Informal Consultation with FWS**

8 mussel species/ atrazine



Risks of Atrazine Use to Eight Federally Listed Endangered Freshwater Mussels:
Pink Mucket Pearly (*Lampsilis abrupta*),
Rough Pigtoe (*Pleurobema plenum*),
Shiny Pigtoe Pearly (*Fusconaia edgariana*),
Fine-rayed Pigtoe (*Fusconaia cuneolus*),
Heavy Pigtoe (*Pleurobema taitianum*),
Ovate Clubshell (*Pleurobema perovatum*),
Southern Clubshell (*Pleurobema decisum*), and
Stirrup Shell (*Quadrula stapes*)

Pesticide Effects Determination

Environmental Fate and Effects Division
Office of Pesticide Programs
Washington, D.C. 20460

February 28, 2007

- **Adverse modification to critical habitat principle constituent elements**
- **Likely to adversely affect based on effects to aquatic plant community**
- **Currently engaged in Formal Consultation with FWS**

Barton springs salamander/ metolachlor

- **Due to be completed May 14, 2007**

Barton springs salamander/ diazinon

- **Due to be completed May 14, 2007**

Upcoming litigation assessments

- **CA red-legged frog**
  - **10 active ingredient effects determinations - July ’07**
  - **10 additional active ingredient effects determinations - October ’07**
- **6 aquatic species (fish and mussels)**
  - **Atrazine – August ’07**
- **Barton springs salamander**
  - **Prometon, simazine and carbaryl – September ’07**

CA red-legged frog – stipulated injunction

- **Requires EPA to develop and distribute a bilingual (English and Spanish) brochure**
- **Enjoins, vacates and sets aside EPA's authorization of uses of the 66 pesticides in certain parts of 33 counties in California**



Exposure to some pesticide products
may harm frogs or their habitat

LAS RANAS Y LOS PELIGROS DE LOS PESTICIDAS



La exposición a algunos pesticides puede ocasionar daño a las ranas o a su habitát

For English, turn over

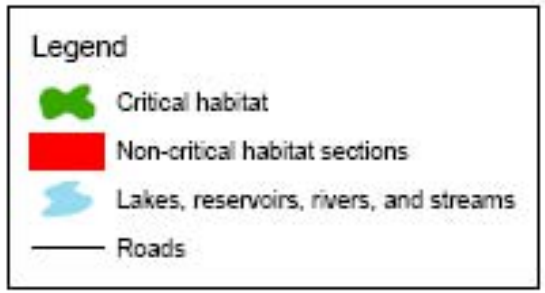
El tribunal de distrito de EE.UU. para el Distrito Norte de California recientemente emitió una orden que requiere que EPA evalúe los efectos potenciales de 66 ingredientes activos de pesticidas en la rana pata roja de California. Adicionalmente, la orden requiere que EPA desarrolle este folleto para cumplir con varios requisitos de la orden del tribunal. EPA está ofreciendo este folleto a través de su sitio Web y distribuyéndolo por correo a ciertos aplicadores certificados en California y otras entidades dictaminadas por la tribunal.

that allows them to live in and out of the water. Frogs, for example, start as tadpoles that live in water and then

Information for Pesticide Users

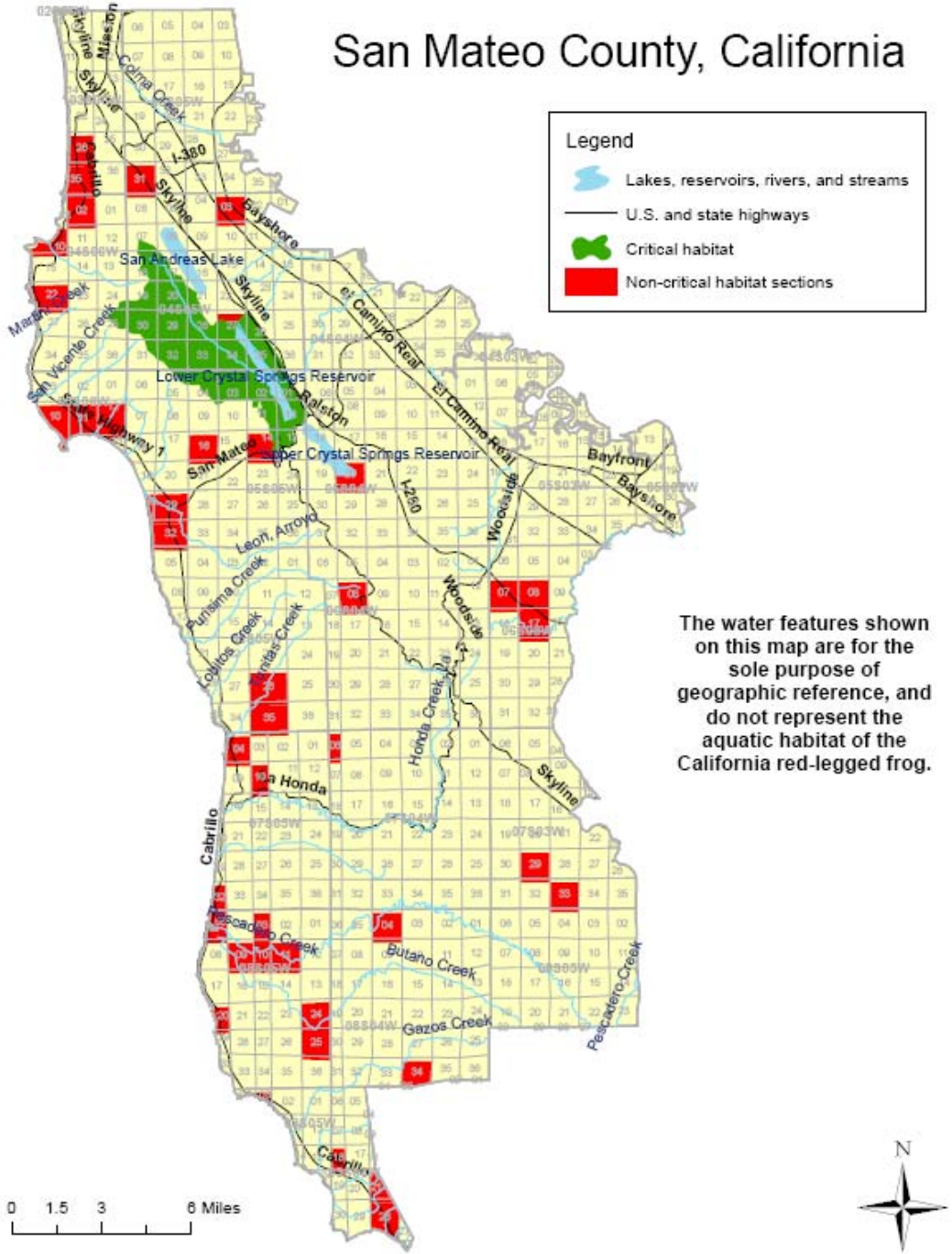
- STEP 1 – ACTIVE INGREDIENTS SUBJECT TO THE INJUNCTION
- STEP 2 – GENERAL GEOGRAPHIC AREAS SUBJECT TO THE INJUNCTION
- STEP 3 – EXCEPTIONS TO THE INJUNCTION
- STEP 4 – DETERMINING WHETHER A SPECIFIC PROPOSED APPLICATION SITE IS SUBJECT TO THE INJUNCTION
  - Definitions
    - Aquatic breeding critical habitat.
    - Non-breeding aquatic critical habitat.
    - Upland critical habitat.
    - Aquatic features.
    - Upland habitats.

San Bernardino County, California



The water features shown on this map are for the sole purpose of geographic reference, and do not represent the aquatic habitat of the California red-legged frog.

San Mateo County, California



The water features shown on this map are for the sole purpose of geographic reference, and do not represent the aquatic habitat of the California red-legged frog.

Registration Review

- **12 Dockets opened to date**
- **Draft work plan**
- **Review of past assessments**
- **Considers data needs and assessment needs for ecological risk assessment including endangered species**

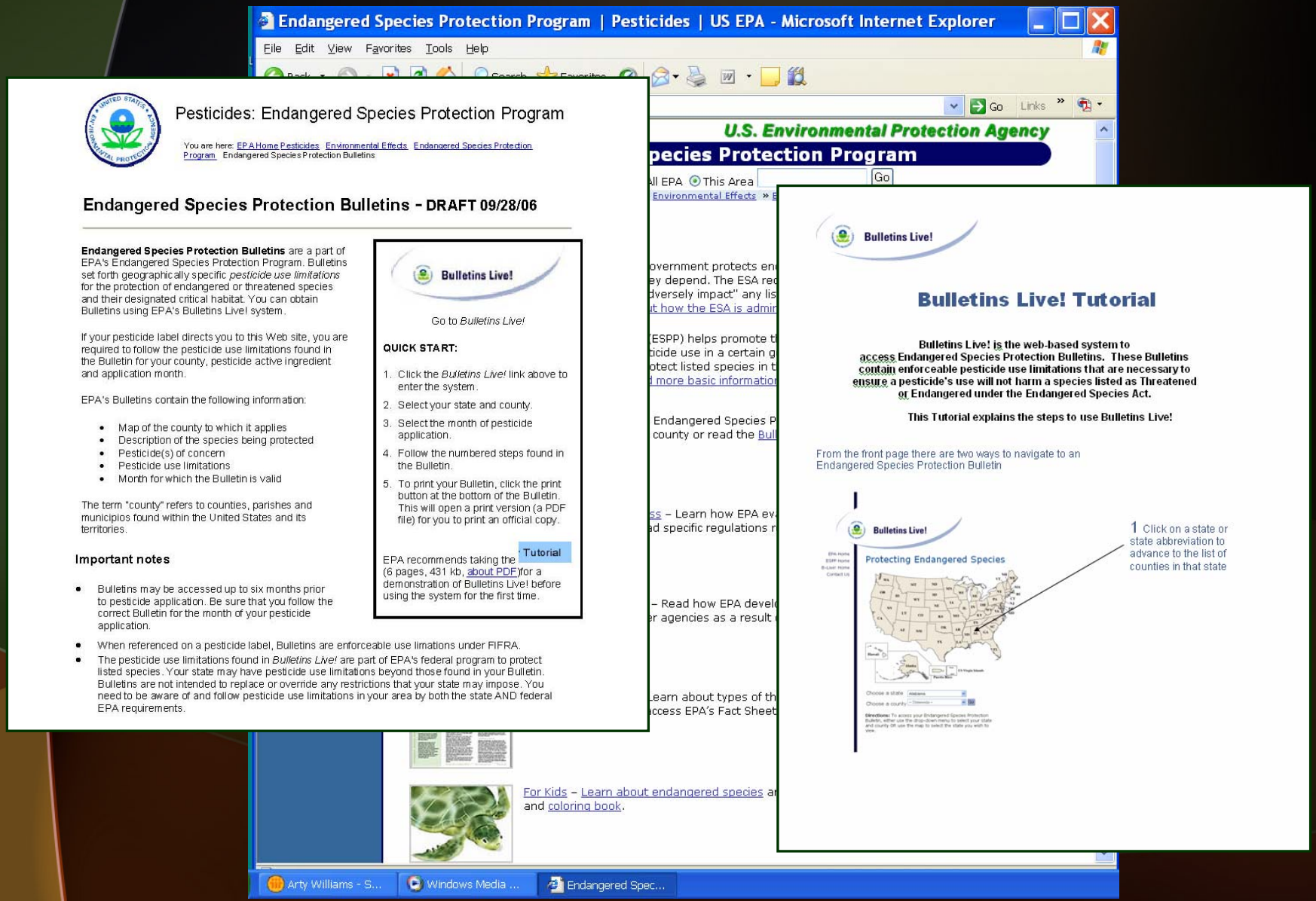
Tool Development - internal

- **Geospatial Tools**
  - **Terrestrial Action Area Development tool (*available now*)**
  - **Use Site Development Tool (*late summer*)**
    - **Linked with NASS Census of Agriculture and NLCD 2001 to identify areas of potential agricultural use**
  - **Aquatic Action Area Development tool (*late summer / early fall*)**
  - **Spatial framework for PRZM/EXAMS (*TBD*)**

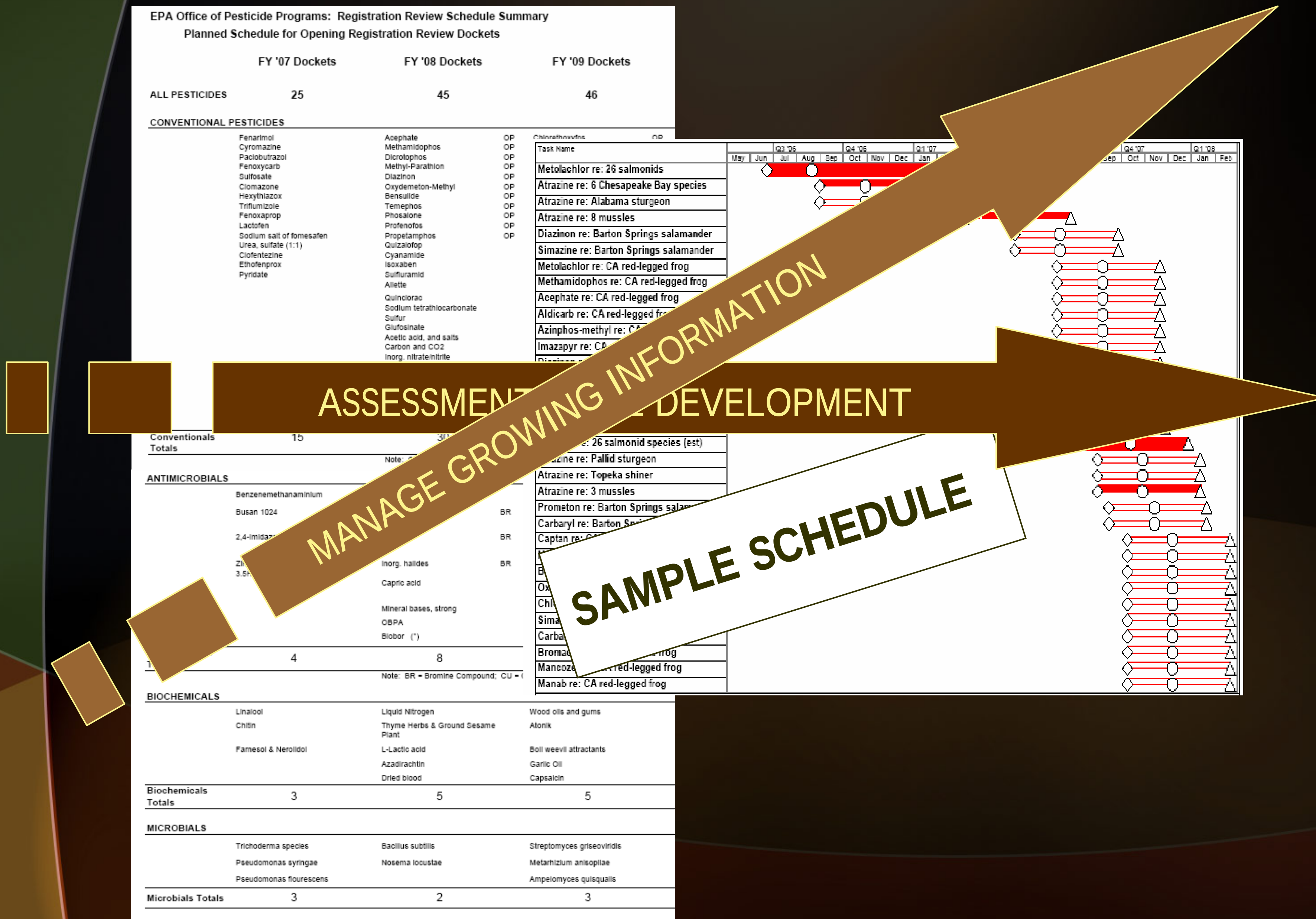
Information Management

- **Data Repositories**
  - **OPP / OEI collaboration on massive (~1TB) geospatial database to contain all OPP needs for geospatial data (*late summer*)**
  - **Tracking System for endangered species actions, including status and timelines (TBD)**
  - **Knowledge Repository to contain both documents used for endangered species assessments and discrete pieces of relevant information (TBD)**

Tool development - external



Challenge


EPA Office of Pesticide Programs: Registration Review Schedule Summary
Planned Schedule for Opening Registration Review Dockets
FY '07 Dockets
FY '08 Dockets
FY '09 Dockets
ALL PESTICIDES
25
45
46
CONVENTIONAL PESTICIDES
Conventionals Totals
ANTIMICROBIALS
BIOCHEMICALS
Biochemicals Totals
3
5
5
MICROBIALS
Microbials Totals
3
2
3
Task Name
Metolachlor re: 26 salmonids
Atrazine re: 6 Chesapeake Bay species
Atrazine re: Alabama sturgeon
Atrazine re: 8 mussles
Diazinon re: Barton Springs salamander
Simazine re: Barton Springs salamander
Metolachlor re: CA red-legged frog
Methamidophos re: CA red-legged frog
Acephate re: CA red-legged frog
Atrazine re: Pallid sturgeon
Atrazine re: Topeka shiner
Atrazine re: 3 mussles
Manab re: CA red-legged frog
ASSESSMENT DEVELOPMENT
MANAGE GROWING INFORMATION
SAMPLE SCHEDULE