

What is Integrated modeling?

Model:

- Something that represents a process or thing in the real world – an abstraction of reality:
 - Helps us understand, explore or make predictions about the world.
 - Physical Model
 - Rule of thumb
 - Back of the envelope calculation
 - A database
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 - Complex Computer models.

Coupled modeling

- Two processes are coupled when they both influence each-other:
 - Dynamics of the ocean and atmosphere
 - Populations of different species.
- If the physics are coupled – the model may have to be coupled as well.
- In spill response modeling: what is and isn't coupled?

Integrated modeling: (for this workshop)

- Flexible definition – it's not just one thing.
- Assimilating and presenting what's available.
- Cutting across disciplines.
- Thinking about the whole system.

Different parts of the modeling system working together to answer the questions that decision makers have.

What it's not:

- Not one big code.
- Not a “black box” with no interaction with the parts.
- Not a coupled model (but pieces may be).
- We don't expect decision makers to run the models.