

# Upstream Discussion Group

## **Attendees:**

- Jill Kerr – XOM
- James Robinson- BP
- Tracy Dyer - BP
- Mark Llewelyn – XOM
- John Veil – ANL
- Gauthier Belhomme - ERM
- Sara McMillen - CVX
- Roland Borey - CVX
- Karen Hayes – Shell
- Sung-I Johnson - ConocoPhillips

# Top 10 Brainstorming Ideas

## **XOM:**

- Decommissioning – platform abandonment, divestiture
- Flaring
- “Protect Tomorrow Today” – developing responsible env stds, quantitative and qualitative or process (e.g. ESAs)
- Access in US or internationally (e.g. DOE funded project on sage grouse for NM).
- Freshwater use/conservation/reuse/recycle
- Marine noise

## **Shell:**

- Biodiversity
- Climate change
- “Reducing impacts to our neighbors”

# Top 10 Brainstorming Ideas

## BP:

- “Environmental requirements for new projects – env performance requirement (EPRs) are 1 aspect
- Deepwater long-term monitoring
- Seismic noise & other impact on marine mammals
- Small power sources
- Produced water env impacts factor reduction (treating most dangerous components)
- Cleanup of oil spills in ice/slush
- De-bottlenecking pw treatment capacity
- Env impacts of subsea processing
- PW beneficial reuse, surface discharge

## ConocoPhillips

- Heavy metal management (Hg, Se, As)
- Heavy oil processes env impacts (e.g. emissions, oil-water separation, drill-cuttings)
- Freshwater reuse
- Global climate change
- Renewable fuels/energy env impacts

# Top 10 Brainstorming Ideas

## CVX

- Flaring
- Climate change greenhouse sequestration
- Risk assessment/due diligence
- Biodiversity
- Energy use conservation
- Social impact assessment & mitigation
- Deep water
- Produced water reuse, zero discharge, treatment
- Metals in oil
- Access to public & govt lands
- Marine noise
- Oil in and on ice
- Compensatory restoration & restoration banking

# Top 10 Brainstorming Ideas

## **ERM**

- Risk assessment
- CO2 control/reduction
- Social/financial impacts

## **ANL**

- Unconventional sources – oils shales, coal-bed methane
- PW re-injection on top of seawater