Committee Evaluated

1. **Subset of Mitigation Projects**
   25 studies, 600+ sites

2. **Field Trips**

3. **Presentations**
   - **Environmental Groups**
     - National Audubon Society, Audubon of FL
     - Environmental Defense
     - The Nature Conservancy
   - **State and Regional Management Organizations**
     - MD, FL, WI, CA
   - **Developers**
     - Greater Orlando Aviation Authority
     - Irvine Ranch Water District
     - Rancho Mission Viejo
   - **Wetland Consultants**
Committee Conclusions

FWS Wetlands Inventory:
404 programs may be discouraging development & requests for permits.

Unlikely institutional mechanisms in place were assuring that promised mitigation was being secured or that the mitigation being implemented used the best available technical knowledge of wetland restoration and creation.
Conclusions

Of the compensation projects required -

Some are not **initiated**

↓

Some are not **completed**

↓

Most are not **evaluated comprehensively**

↓

Scientists find **shortcomings** relative to nearby reference systems.
Committee on Mitigating Wetland Losses

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution &amp; Location</th>
<th>Field</th>
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<tbody>
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Recommendations

Mitigation efforts should be integrated within larger regions.

States work with federal agencies to set priorities for wetland protection, acquisition, restoration, enhancement, and creation projects on a landscape or watershed basis.
Committee Conclusion

For all approaches to compensation:
- Permittee-responsible
- Mitigation banks
- In-lieu fees

**Compliance Requirements:**

1. Required compensation project is initiated concurrent with fill activity.

2. Projects are constructed according to established design/performance criteria.

3. Permittee provides a recognized stewardship organization with an easement on, or title to, the compensatory wetland site and a cash contribution appropriate for the long-term monitoring, management and maintenance of the site.
Recommendations

Corps and other responsible regulatory authorities need to commit funds to enhance training of staff and the sharing of experiences across districts.

Corps should prepare region-specific manuals for restoring wetland functions, organized around the 10 guidelines.

Corps and other responsible authorities should establish a research program to identify the practices that best achieve long-term performance.
Institutional Mechanisms - Recommendations

The committee does not endorse a particular mechanism for mitigation.

Instead recommend improved performance of all approaches
* Permittee-responsible projects
* 3rd party: mitigation banks & ILF programs

All these institutional systems need to provide compensatory mitigation

- Timely
- Compensates for all fills
- Integrated within watersheds
- Assures long-term sustainability and stewardship
Committee Conclusions

Some types of wetlands can be restored; some can be created in some places.

Uncertainty - how many and which functions are provided?

Committee concurs with current policy that restoration of former wetland is preferred over creation of wetland.

10 guidelines - self-sustaining wetlands.
Conclusions & Recommendations

Some types of wetlands are especially difficult to create or restore because they have unique features.

- Fens - high-quality groundwater
- Bogs - time for peat accumulation
- Vernal pools – flat topography

Discharges to such wetlands must be avoided to retain wetland functions.

Open water ponds are favored as compensation wetlands.
- Meet definition criteria of wetlands
- Limited hydrologic variability
- Do not replace all the functions of other wetland types
Conclusions

Wetlands placed in atypical landscape settings raised questions about their long-term sustainability.

Some highly functional wetlands will be inadvertently degraded by developments elsewhere in their watershed.

Overall consideration of appropriate compensatory mitigation requires a watershed perspective.

Compensation could then occur in the places and conditions that are most likely to achieve sustainable functions.