



CLIMATE  
ACTION  
RESERVE

# Jurisdictions, Projects, and Nesting

## Reconciling Project and Jurisdiction Emissions

# Situating Projects in a Compliance Market



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- Current ARB thinking
  - Credits issued directly to projects, but...
  - Government must meet ARB minimum commitments
  - Will require jurisdictional accounting
  - Achievement of significant reductions
- Nested Projects:
  - Provide a mechanism to credit projects within a jurisdictional system.
  - Activities and verification managed at the project level, but reconciled with, and subject to the performance of, the jurisdiction's achieved emissions reductions and removals



# A Path to Nested Projects

Voluntary projects → Stand-alone projects → Nested projects

- Voluntary projects need no ARB or state action
  - No uncertainty
- There *may* be potential to credit “stand-alone” projects prior to full jurisdictional attainment
- Stand-alone projects and nested project methodologies do not exist
  - Highly conceptual
  - Opportunity to proffer proposal to ARB and other groups
- Workgroup should develop standards catered to multiple project phases, considering transition and nesting mechanisms



# From Voluntary to Nested Projects

## Voluntary Projects

### Project Activities

- Reserve develops voluntary project standards:
- Activities credited to the voluntary market
- Independent MRV, leakage, permanence assessments

### Jurisdiction Activities

- Jurisdiction commitment not required
- Jurisdiction working towards minimum requirements of ARB
- No credits issued by or managed by jurisdiction

- Current status of market
- High certainty that Reserve protocol will be accepted in voluntary market

# From Voluntary to Nested Projects

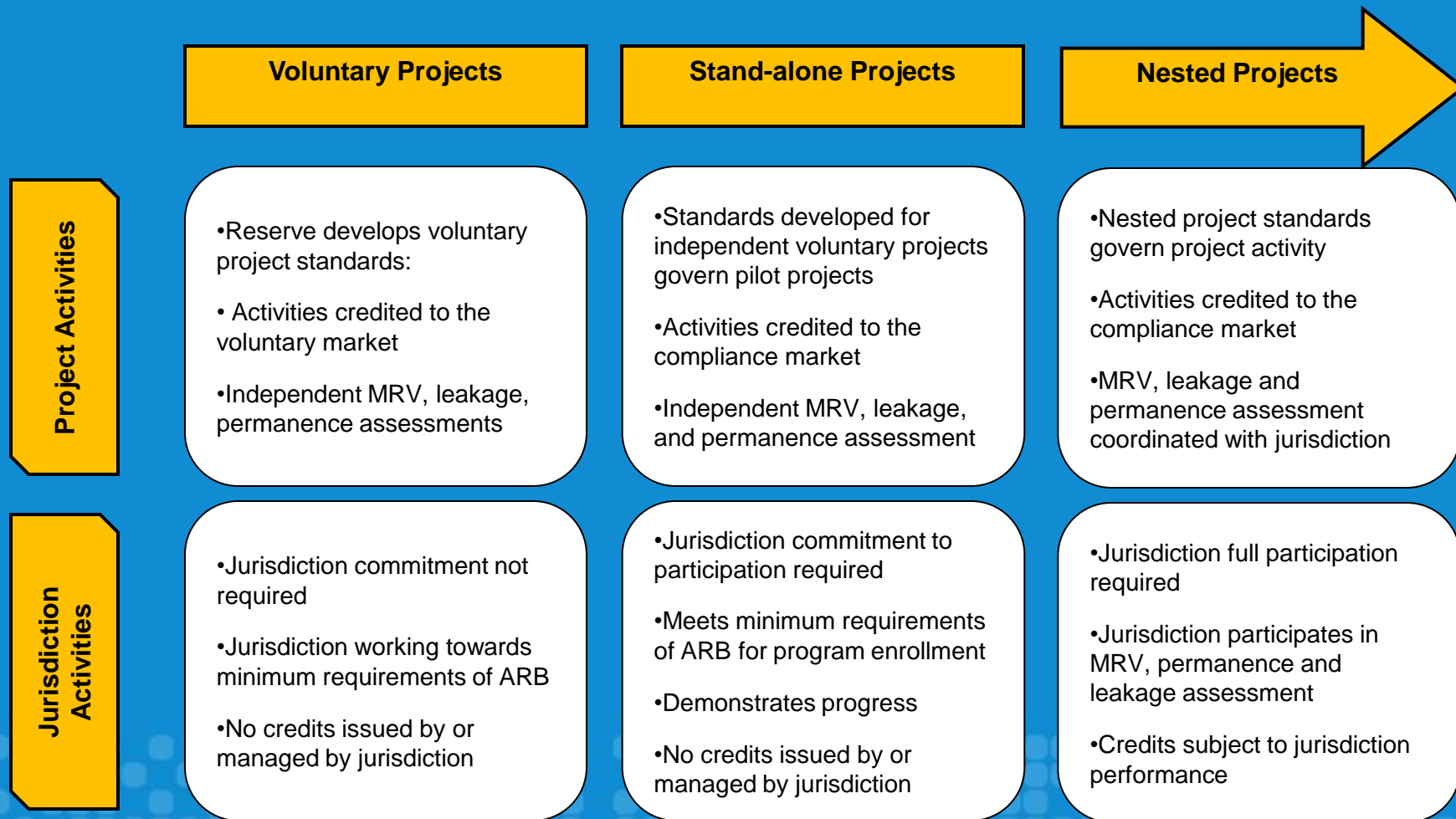


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	Voluntary Projects	Stand-alone Projects
Project Activities	<ul style="list-style-type: none"><li>• Reserve develops voluntary project standards:</li><li>• Activities credited to the voluntary market</li><li>• Independent MRV, leakage, permanence assessments</li></ul>	<ul style="list-style-type: none"><li>• Standards developed for independent voluntary projects govern pilot projects</li><li>• Activities credited to the compliance market</li><li>• Independent MRV, leakage, and permanence assessment</li></ul>
Jurisdiction Activities	<ul style="list-style-type: none"><li>• Jurisdiction commitment not required</li><li>• Jurisdiction working towards minimum requirements of ARB</li><li>• No credits issued by or managed by jurisdiction</li></ul>	<ul style="list-style-type: none"><li>• Jurisdiction commitment to participation required</li><li>• Meets minimum requirements of ARB for program enrollment</li><li>• Demonstrates progress</li><li>• No credits issued by or managed by jurisdiction</li></ul>

- Unclear under AB 32 if stand-alone projects will be eligible
- Unclear how stand-alone projects might operate
- Workgroup has an opportunity to influence process/rules

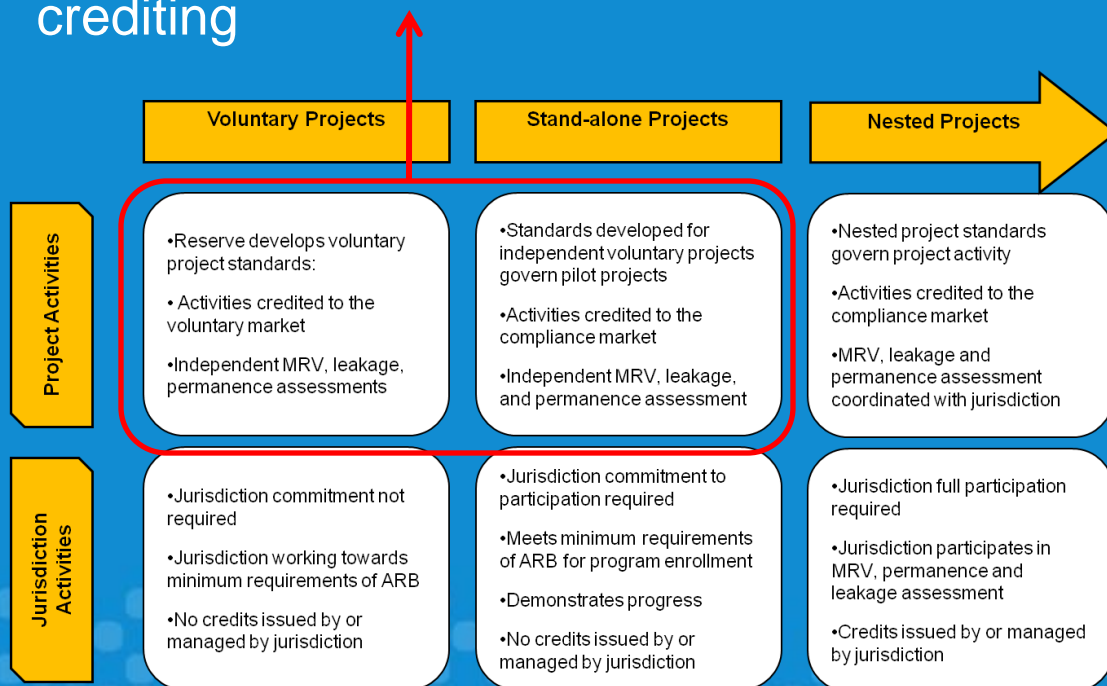
# From Voluntary to Nested Projects





# Workgroup Objectives

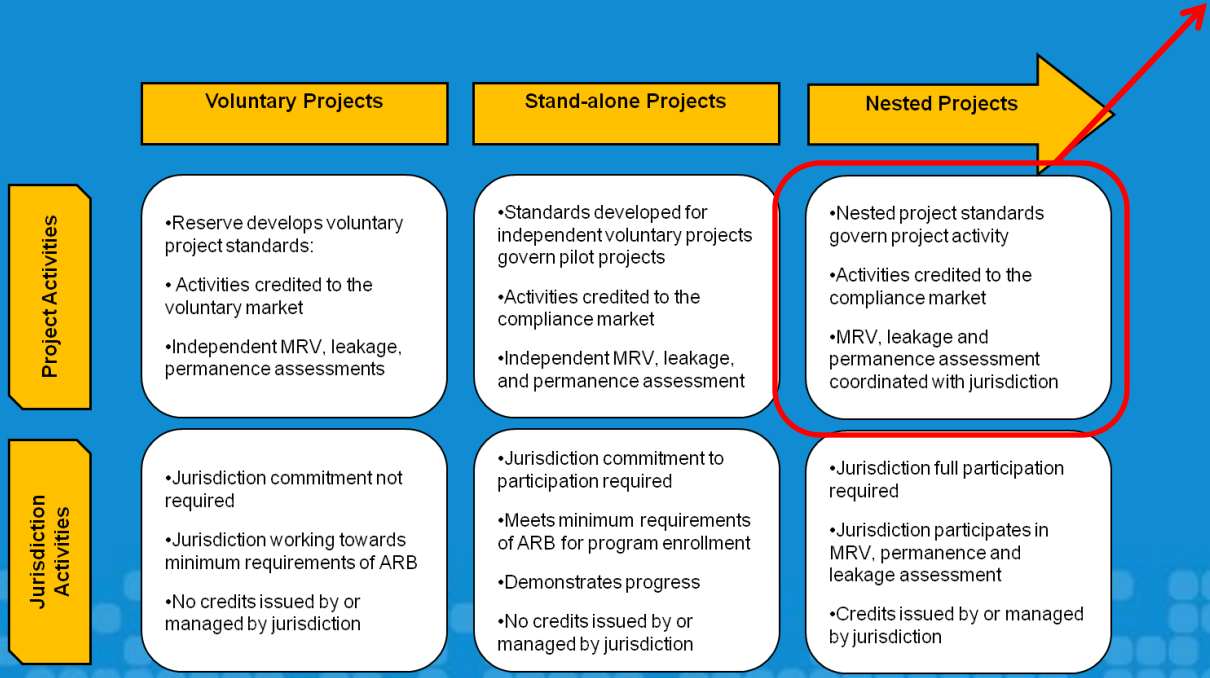
- Three primary objectives for Reserve workgroup:
- Objective 1: Develop voluntary/pre-nested project standards to govern project activities for independent crediting





# Workgroup Objectives

- Three primary objectives for Reserve workgroup:
  - Objective 1: Develop voluntary project standards to govern project activities within a jurisdictional architecture
  - Objective 2: Develop nested project standards to govern project activities within a jurisdictional architecture

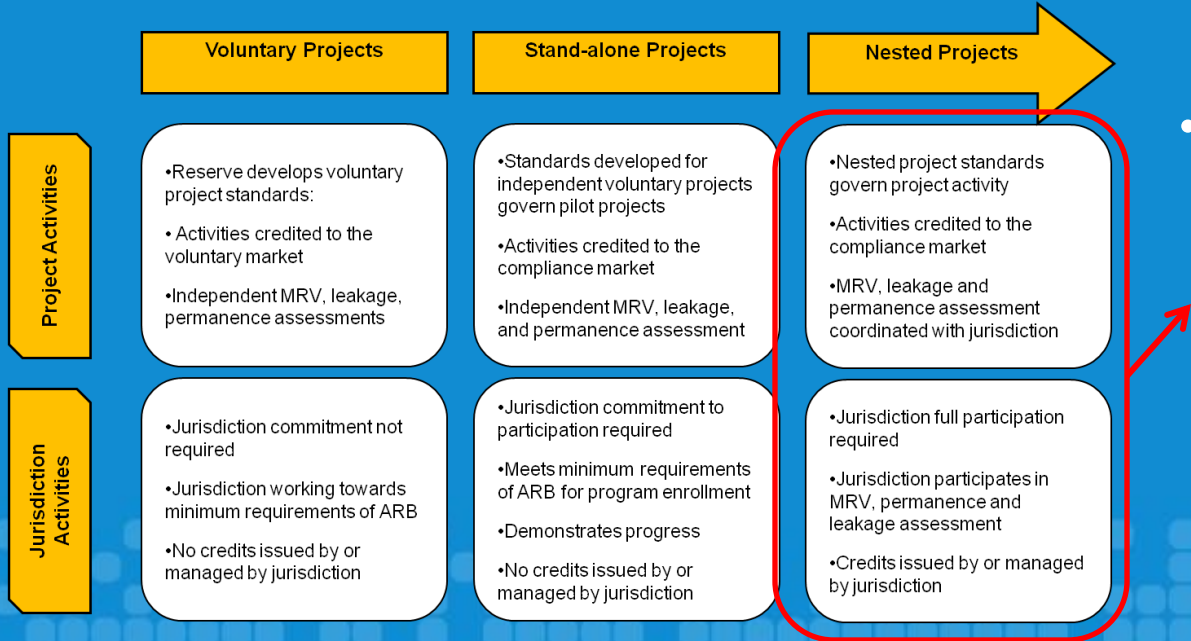






# Workgroup Objectives

- Three primary objectives for Reserve workgroup:



- Objective 3: Develop nesting architecture to reconcile project and jurisdictional accounting

# Components Likely to be Similar Between Voluntary/Pre-nested and Nested Projects



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## Voluntary/Stand-alone Projects

## Nested Projects

### Project Description

Description of project resources, activities, and benefits common between approaches.

### Project Eligibility

Eligibility generally consistent between approaches. Some variation exists in required crediting and monitoring period.

### GHG Assessment Boundaries

The accounting of project sources, sinks and reservoirs is similar between approaches, although statistical rigor of estimates will be reduced for nested projects.

### Environmental Co-Benefits

Requirements for achieving environmental co-benefits equal for project life, which may vary between pilot projects and nested projects.

### Public Participation

Requirements for public participation will be similar, although there may be a shift from public participation associated with projects to greater public participation associated with jurisdiction-wide policy development and monitoring.

# Components Likely to be Different Between Voluntary/Pre-nested and Nested Projects



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## Voluntary/Stand-alone Projects

## Nested Projects

### Additionality

Assessed at project specific resolution

Assessed less at a project-specific level with greater focus on jurisdictional assessment.

### Baseline Quantification

Assessed at project specific resolution

Assessed less at a project-specific level with greater focus on jurisdictional assessment.

### Project Quantification

Assessed at a project specific resolution. Period for project quantification commensurate with permanency requirements at project level.

Assessed less at a project-specific level with greater focus on jurisdictional assessment. Quantification costs are reduced at the project level.

### Leakage

Assessed and mitigated at a project specific resolution.

Assessed and mitigated at jurisdictional resolution. Mitigation costs for leakage reduced at the project level provided emissions reduction targets are met.

### Permanence

Permanence linked directly to project reductions/removals.

Permanence linked directly to increased jurisdiction expectations of achieving reductions/removals with reduced burden to projects.

### Verification

Verification activities are intensive at the project level

Verification activities are less intensive at the project level with a shift toward jurisdictional verification



# Distribution of Benefits and Burdens

- Jurisdiction absorbs and spreads risks
  - Permanence and leakage in particular
- What do jurisdictions gain, why participate?
  - Tax on projects
  - Currently, no AB 32 crediting to jurisdictions
- Do jurisdictions have sufficient resources?

# Mechanics of Jurisdiction Accounting



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- Importance to this process
  - Opportunity for group to offer guidance
  - Ensure compatibility of project protocols
  - Jurisdiction performance may limit credits to projects
  - Assess jurisdictional resource needs
- Overview of accounting
  - Establish Assessment Areas
  - Determine Assessment Area-specific stocking levels
  - Monitor Assessment Areas
  - Derive inventory from area and stocking levels
  - Naturally feeds into stock-change accounting



# Assessment Areas

- Defined by forest community
- Common forest characteristics
- Common stocking levels *per class*



# Stocking in Assessment Area

‘X’



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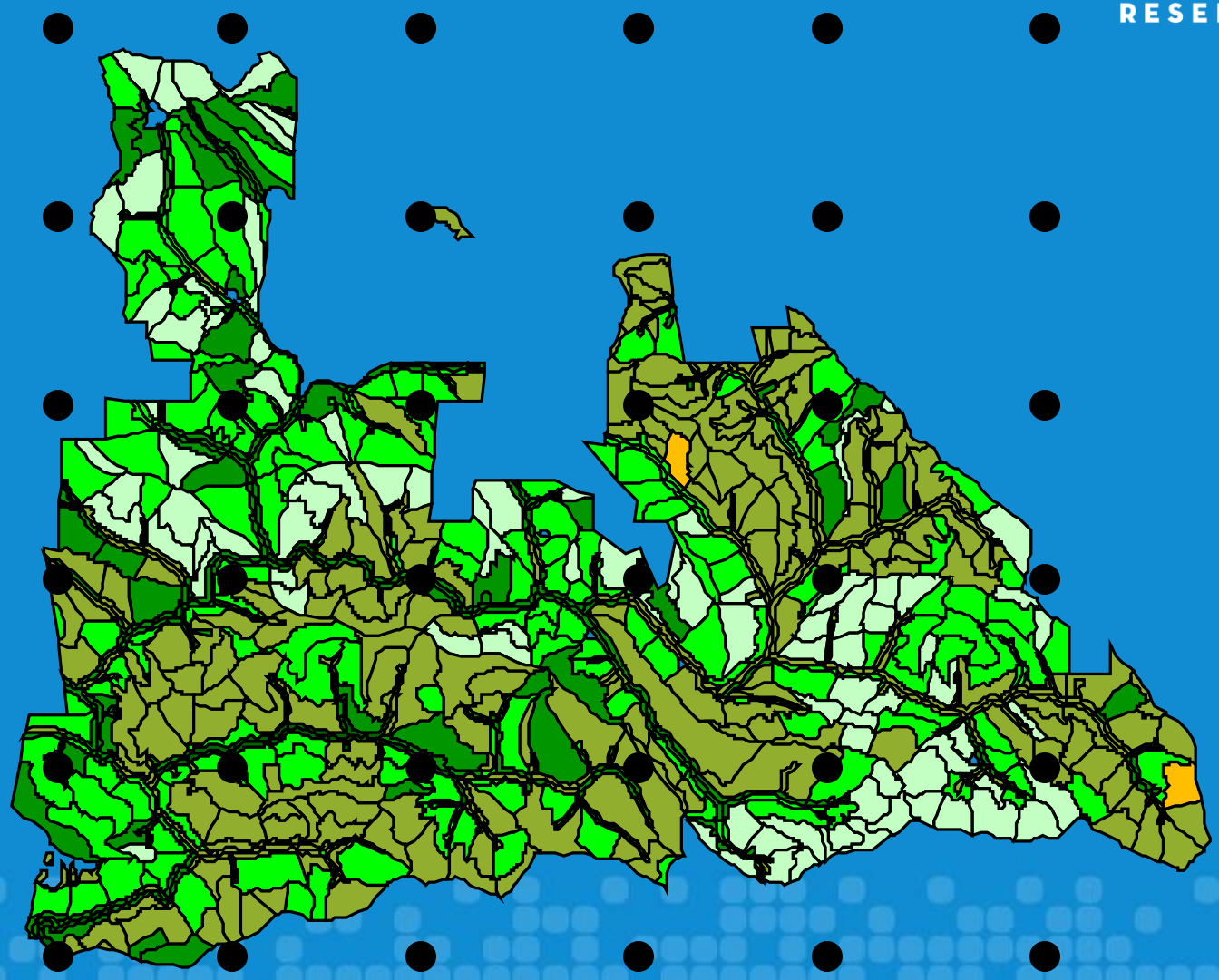
Forest Class	Stocking Level (tCO2/ha)
<b>Primary Forest</b>	<b>183</b>
> 66% canopy	200
33-66% canopy	180
<33% canopy	170
<b>Secondary Native Forests</b>	<b>135</b>
<b>Secondary non-Native Forests</b>	<b>120</b>

- Establish stocking levels by class
- Data source:
  - Use CONAFOR permanent plots?
  - Other data sources?
- How often should these be re-assessed?
- What is government capacity?

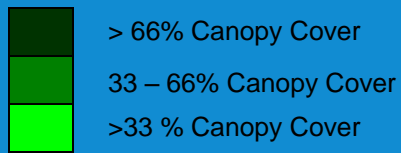
# Forest Vegetation Classes in Assessment Area 'X'



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## Primary Forest



## Secondary Native Forest



## Secondary Non- Native Forest



## Non-forest





# Calculate Inventory of Assessment Area 'X'



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Forest Class	Year 1 (ha)	Year 1 (tCO <sub>2</sub> e)
<b>Primary Forest</b>	8,100	1,527,000
> 66% canopy	4,200	840,000
40-79% canopy	2,400	432,000
20-39% canopy	1,500	255,000
<b>Secondary Native Forests</b>	4,700	634,500
<b>Secondary non-Native Forests</b>	7,150	858,000

- Inventory calculated using
  - Current stocking levels
  - Assessment Area
  - Mapping
- Total stocks by category combined for all Assessment Areas
- Jurisdiction emissions equal to annual stock loss

# Reconciliation



- ARB current thinking
  - Project reductions should *not* count towards jurisdiction crediting baseline
- Any project reductions should be *added* to jurisdiction emissions
  - Avoided Deforestation: Primary Forest
  - Reforestation: Secondary Forest

Forest Class	Jurisdiction Emissions (tCO <sub>2</sub> e)	Project Reductions (tCO <sub>2</sub> e)	Net Jurisdiction Emissions (tCO <sub>2</sub> e)
<b>Primary Forest</b>	35,250	5,000 (Avoided Deforestation)	40,250
> 66% canopy	40,000		
33-66% canopy	(9,000)		
<33% canopy	4,250		
<b>Secondary Native Forests</b>	4,050	50 (Reforestation)	4,100
<b>Secondary non-Native Forests</b>	(36,000)	0	(36,000)

# Reconciling Jurisdiction Emissions with Project Reductions



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- Ability to credit projects is dependent on jurisdictions performance
  - If jurisdiction emissions are higher than crediting baseline, no project credits will be issued

<b>Forest Class</b>	<b>Net Jurisdiction Emissions (tCO2e)</b>	<b>Jurisdiction Crediting Baseline (tCO2e)</b>	<b>Max. Credits issued to Projects (tCO2e)</b>	<b>Unissued Credits (tCO2e)</b>
<b>Primary Forest</b>	40,250	39,000	0	5,000
<b>Secondary Native Forests</b>	4,100	4,400	300	0

- How the crediting baseline is set will affect
  - When projects are eligible to receive credits
  - How many credits can be issued to projects
- Options for setting jurisdiction crediting baseline
  - Trend to zero emissions at year X
  - Limit on total net future emissions



# Unsettled Questions for ARB

- Jurisdictional Issues
  - Policy for establishing crediting baseline
  - Policy for maximum permissible further primary deforestation
  - Policy for time in which there is 0-net (includes all native stocks from) deforestation
  - Baseline for jurisdictions with minimal/no deforestation
- Project Issues
  - Policy to protect projects from risk of jurisdictional non-attainment
  - Policy to credit stand-alone projects prior to jurisdictional attainment