

Alberni-Clayoquot Regional District

# SWMP Review & Implementation Process

Carey McIver

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Solid Waste Plan Monitoring Advisory Committee – Alberni Valley

December 17, 2014



Carey McIver & Associates Ltd.

# Meeting Agenda

## 1. Background

- \* ACRD Solid Waste Management Plan
- \* Plan Implementation Schedule

## 2. ICI Disposal Bans

- \* Hauler Consultation Results
- \* Draft Communications Plan
- \* Work Plan, Budget and Schedule

## 3. Organics Diversion Opportunities Assessment

- \* WC Stakeholder Feedback
- \* Next Steps



ACRD SWMP Review & Implementation Process

# Background

# 2007 Solid Waste Management Plan

| Plan Component                        | New Diversion | Status     |
|---------------------------------------|---------------|------------|
| Reduction & Reuse                     | 1-2%          | Complete   |
| Residential Recycling                 | 9%            | Complete   |
| ICI Recycling                         | <b>15%</b>    | Incomplete |
| Organic Waste Diversion               | <b>5%</b>     | Incomplete |
| Residual Waste Management             |               | Complete   |
| Demolition/Construction/Land Clearing | <b>8%</b>     | Incomplete |
| Promotion & Education                 |               | Complete   |
| Bear Awareness                        |               | Complete   |
| Illegal Dumping Prevention            |               | Complete   |
| Product Stewardship                   |               | Complete   |
| First Nations Linkages                |               | Complete   |
| Total Estimated New Diversion         | 39%           |            |

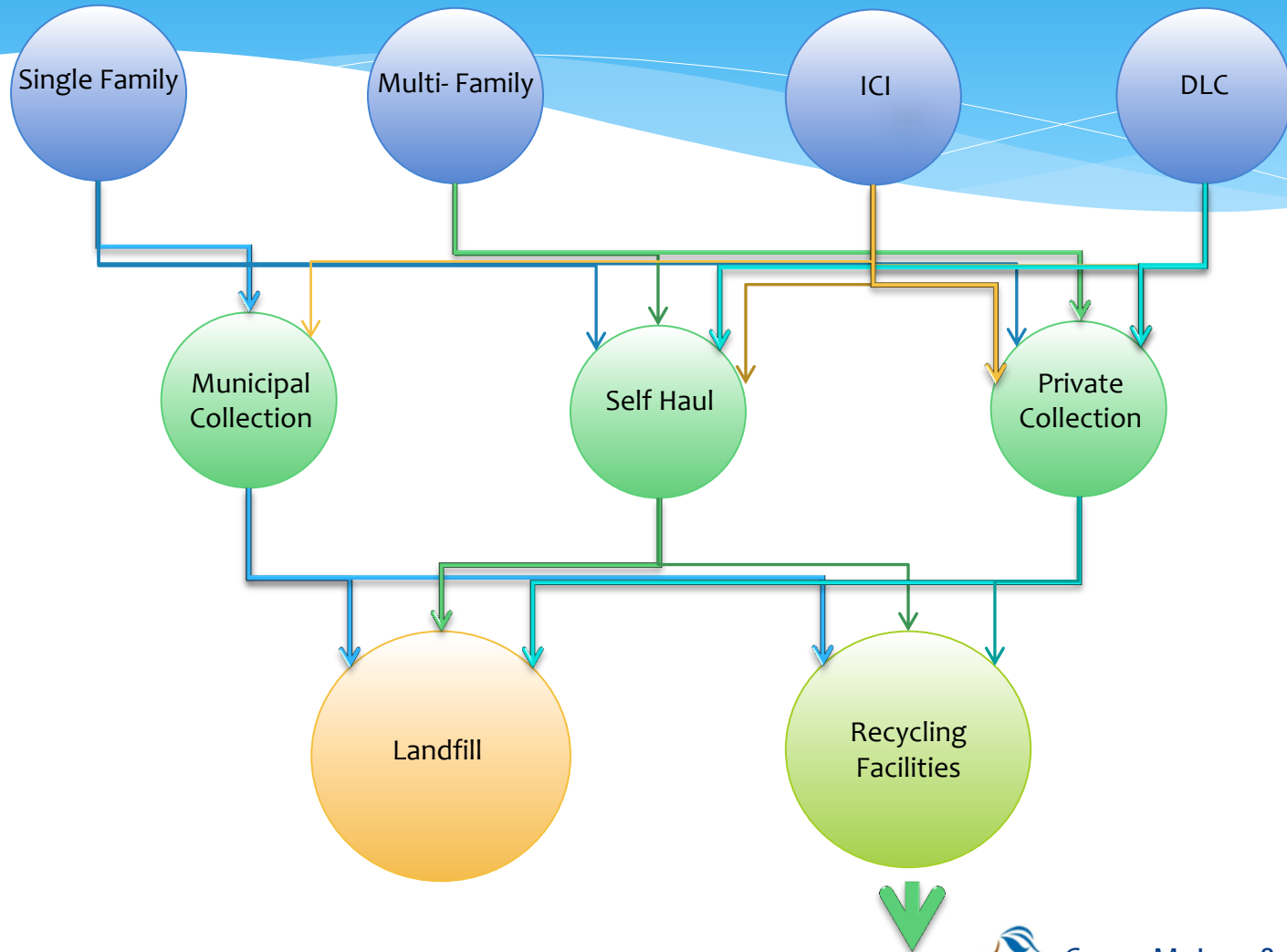


# Diversion Potential

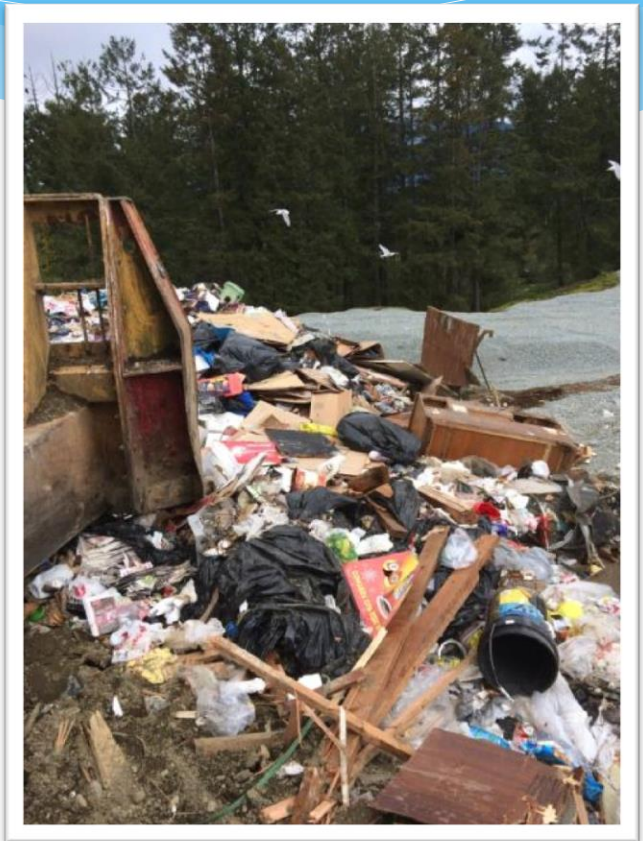
| 2007 Plan                     | 2005 | 2012 |
|-------------------------------|------|------|
| Diversion Rate                | 15%  | 54%  |
| Disposal Rate (kg per capita) | 790  | 400  |



# Existing System



# Alberni Valley Landfill



# AV Landfill Recycling Depot





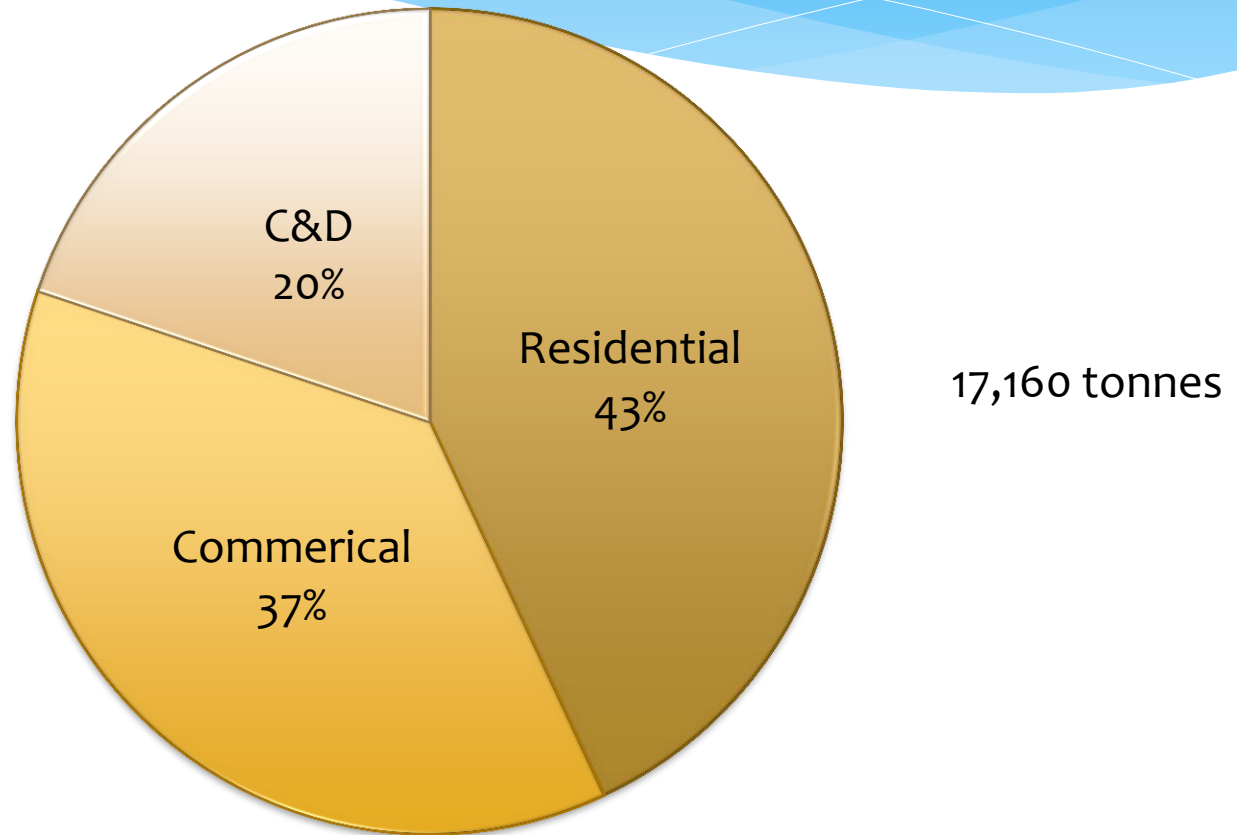
# 3<sup>Rd</sup> Avenue Recycling Depot



# Bamfield Recycling Depot

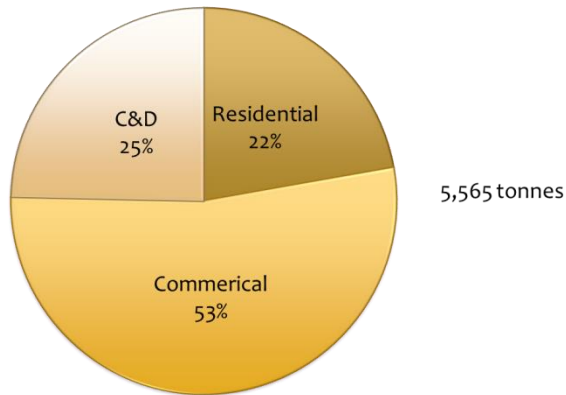


# Alberni Valley Waste Disposal

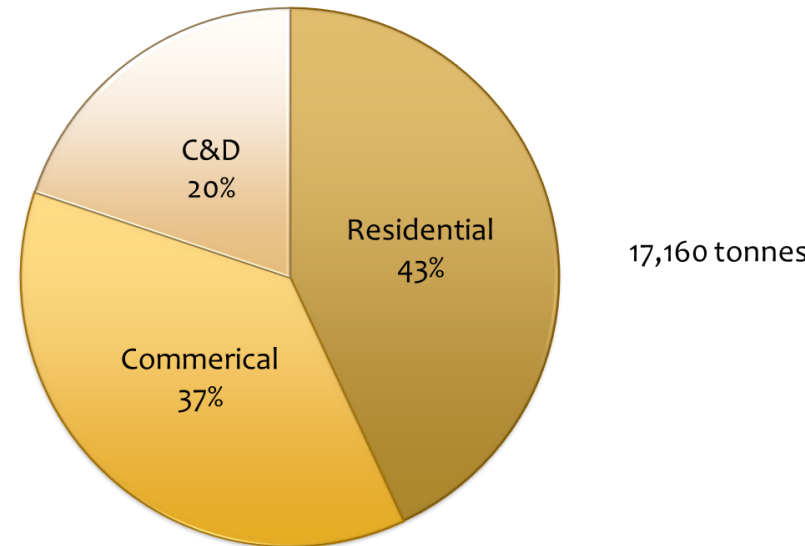


# Waste Disposal Comparison

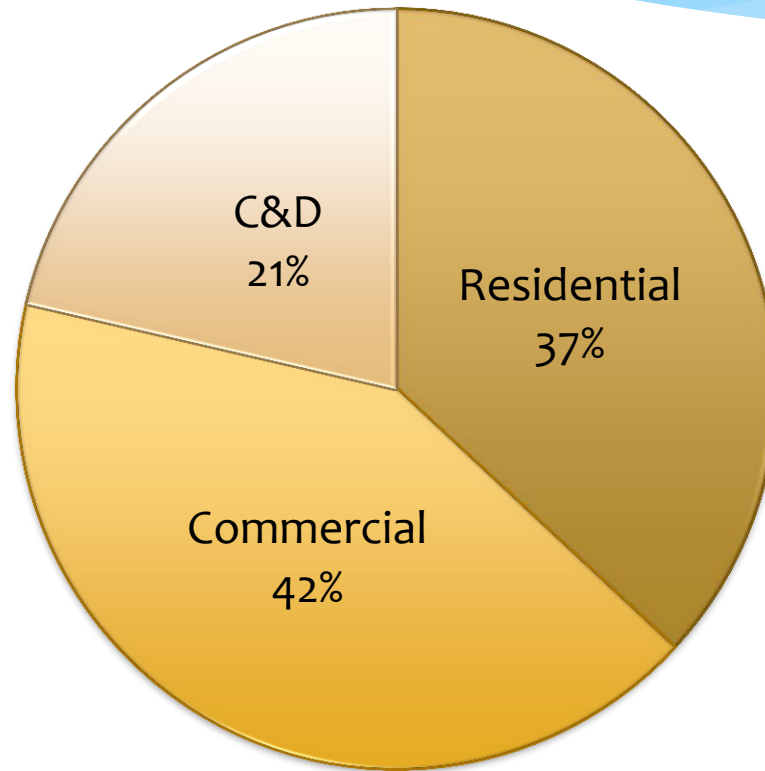
West Coast Landfill



Alberni Valley Landfill



# ACRD Total Waste Disposal



22,725 tonnes  
740 kg per capita

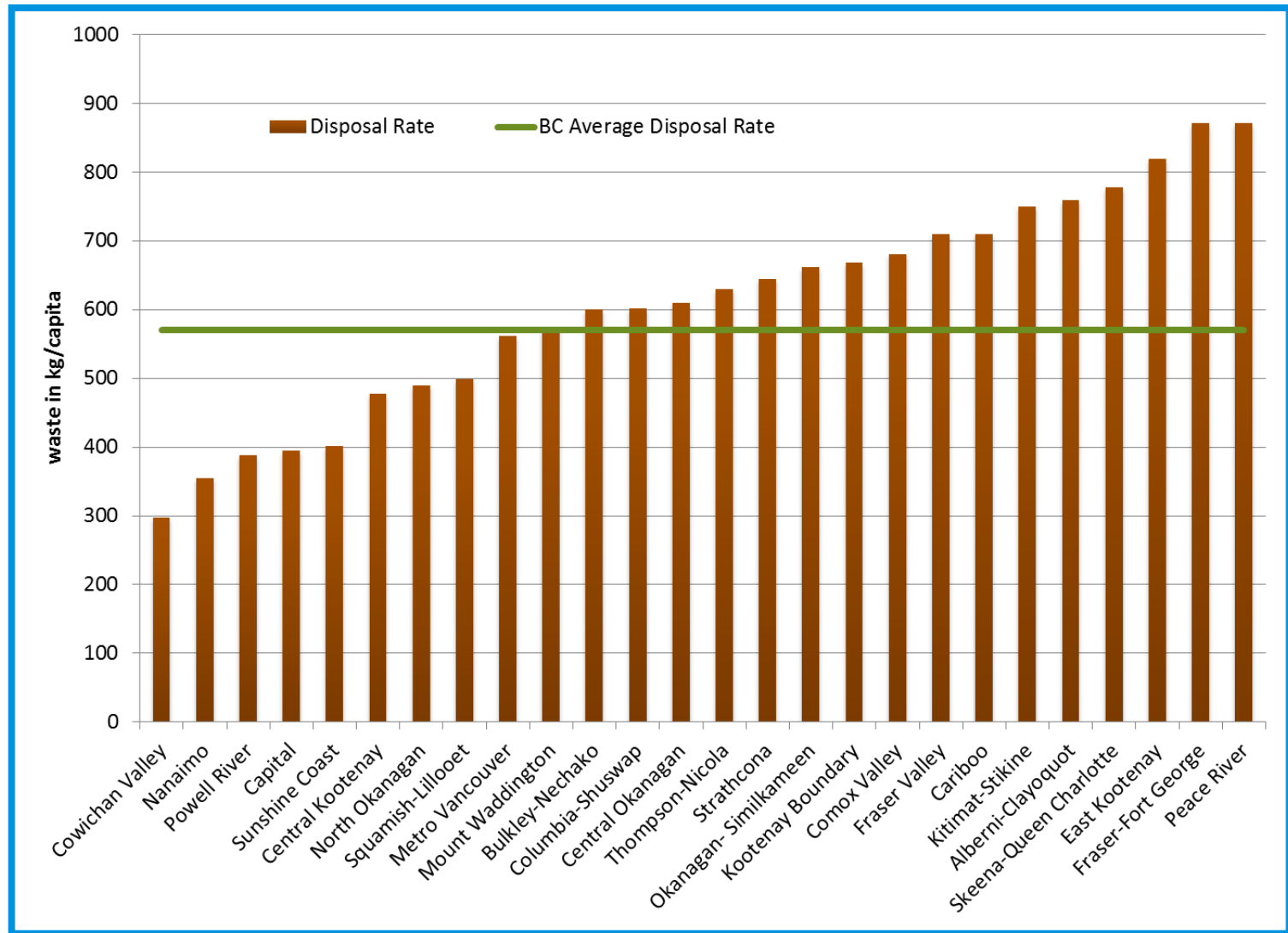


# Current Performance

| 2007 Plan      |                   | Current Performance |                   |
|----------------|-------------------|---------------------|-------------------|
| Diversion Rate |                   |                     |                   |
| 2005:          | 15%               |                     |                   |
| 2012:          | 54%               | 2013:               | 20%+              |
| Disposal Rate  |                   |                     |                   |
| 2005:          | 790 kg per capita |                     |                   |
| 2015:          | 400 kg per capita | 2013:               | 740 kg per capita |



# Regional District Disposal Rates



# 2014

## Plan Implementation Schedule

| Plan Component                                   | Timeline             |
|--|----------------------|
| <b>ICI Disposal Bans</b>                         |                      |
| Stakeholder Consultation                         | Nov 2014-Feb 2015    |
| Bylaw Amendment                                  | March 2015           |
| Phase-In Enforcement                             | April 2015-Sept2015  |
| Full Enforcement                                 | Oct 2015             |
| <b>Organic Waste Diversion</b>                   |                      |
| Organics Diversion Opportunities Assessment      | Nov 2014 – Feb 2015  |
| Organics Diversion Strategy                      | April 2015           |
| Program Implementation                           | Sept 2015-March 2016 |
| <b>Construction, Reno &amp; Demolition Waste</b> |                      |
| Investigate markets for wood waste               | 2015                 |
| Implement Disposal Ban                           | 2016                 |



ACRD SWMP Review & Implementation Process

# Background *Questions?*

ACRD SWMP Review & Implementation Process

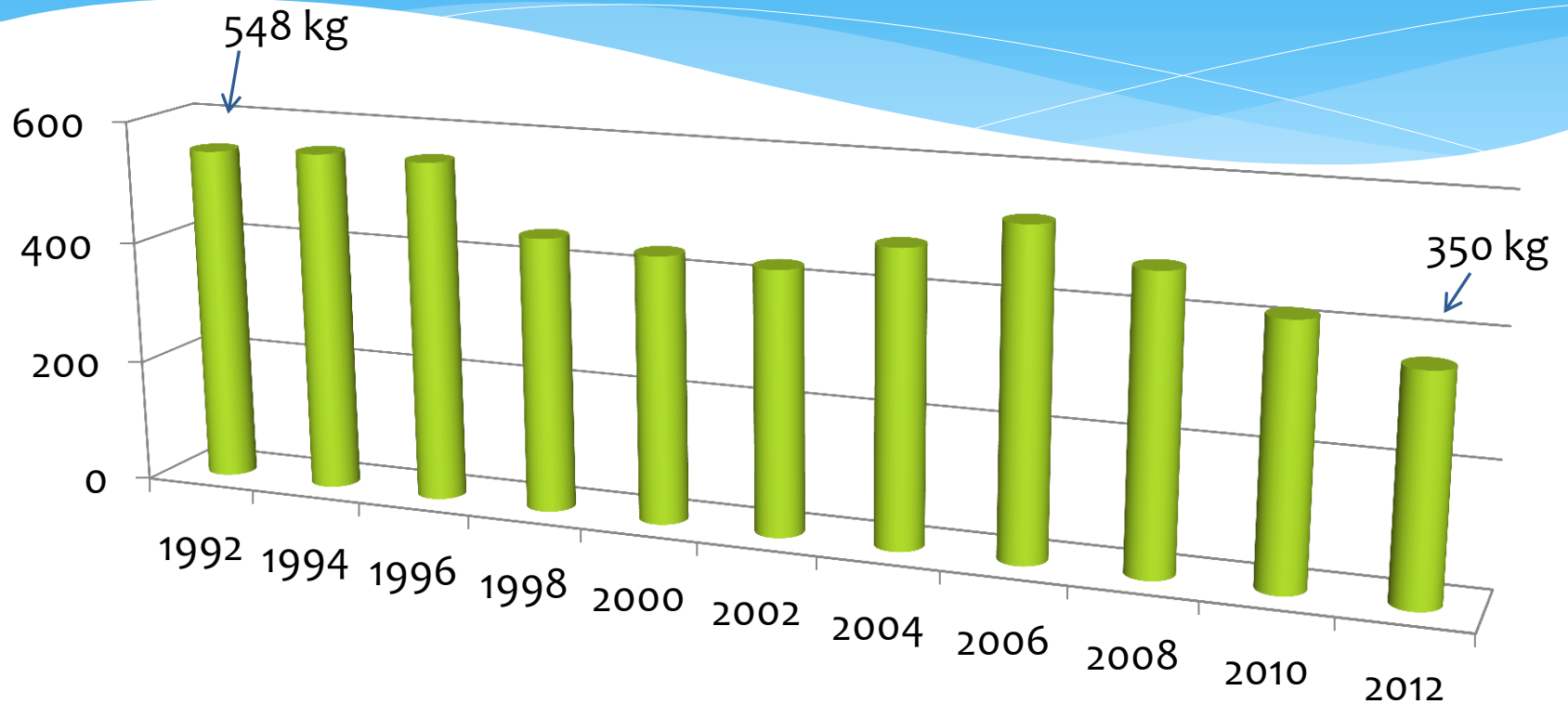
# ICI Disposal Bans

# RDN Landfill Disposal Bans

- \* Gypsum (1991)
- \* Land clearing waste (1992)
- \* Corrugated cardboard (1993)
- \* Recyclable Paper (1997)
- \* Scrap Metal (1997)
- \* Tires (1997)
- \* Commercial organic waste (2005)
- \* Garden waste (2007)
- \* Wood Waste (2007)
- \* Stewardship Materials (2007)
- \* Household Plastic Containers (2009)
- \* Metal Food & Beverage Containers (2009)



# RDN Annual Disposal Rate



# 2007 SWMP – Disposal Bans

- \* Proposed bans on recyclable materials such as:
  - \* Cardboard
  - \* Paper
  - \* Metal
  - \* Yard Waste
  - \* Stewardship Program Materials
- \* Based on stability and capacity of local diversion infrastructure
- \* New diversion potential 15% or 3400 tonnes



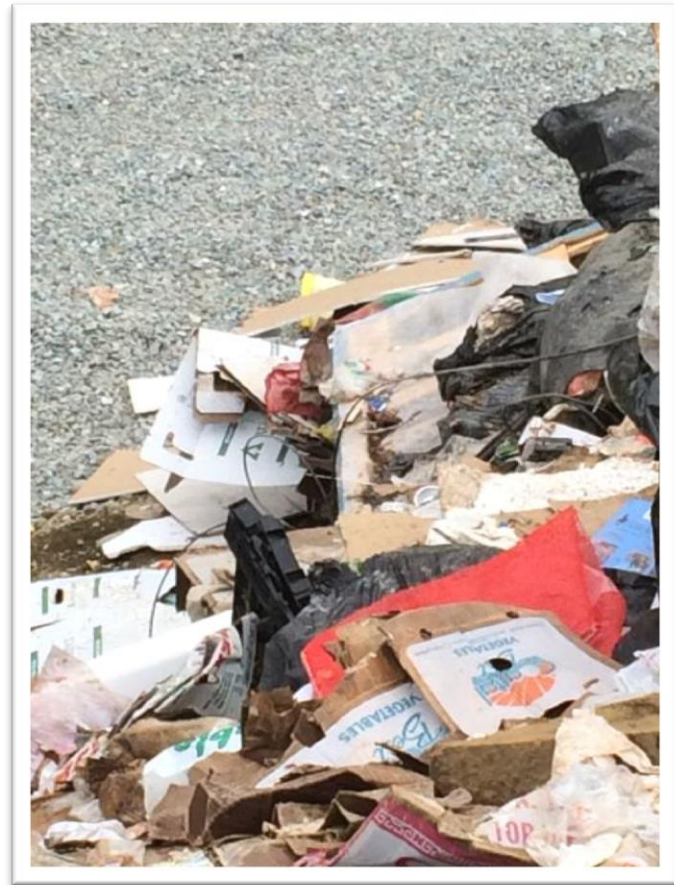
# Current Regulations Alberni Valley

## Bylaw R1006-5 Alberni Valley Tipping Fee Amendment, 2013

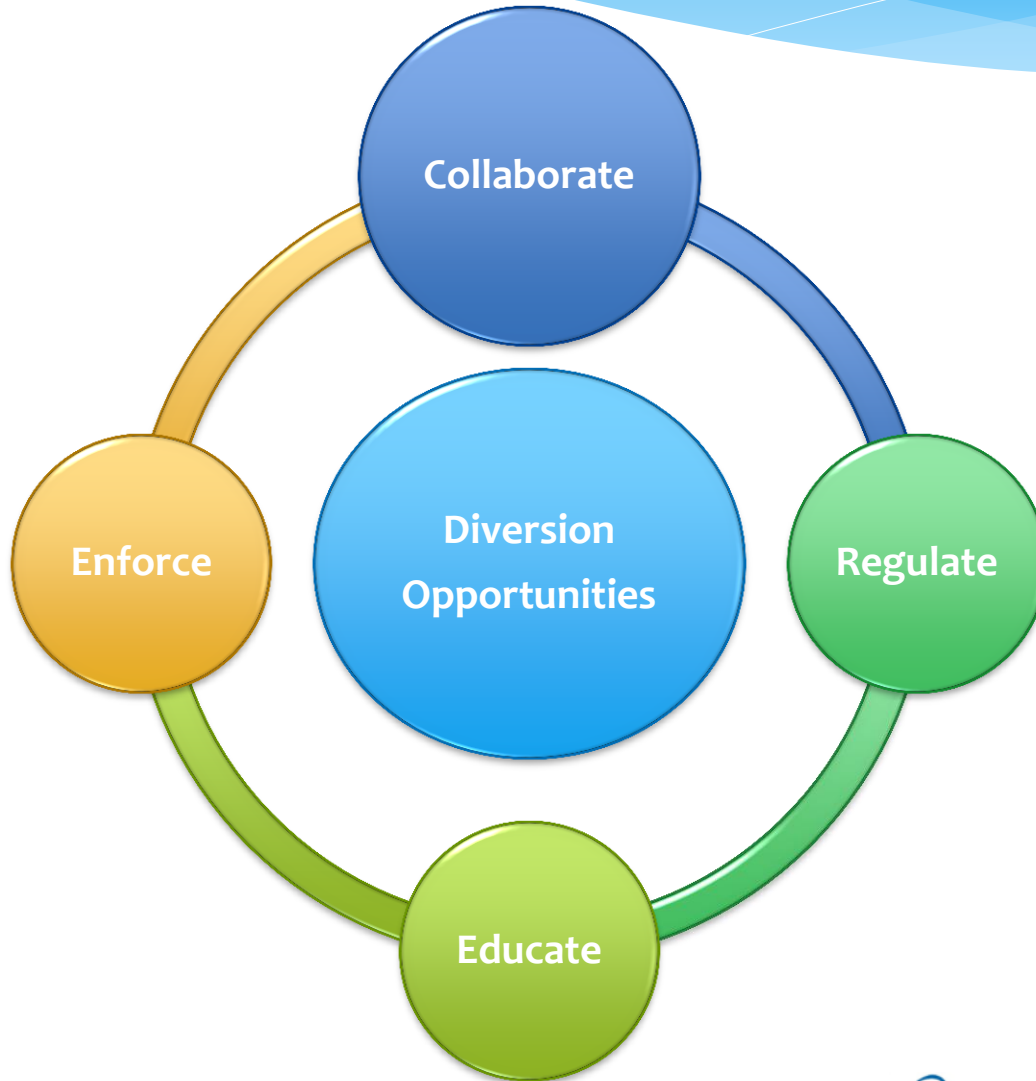
- \* Garbage - \$95 per tonne
- \* No charge for recyclable material
  - \* Paper, metal, boxboard, corrugated cardboard, compostable materials
  - \* Excludes any material contaminated by food or oil or a controlled waste
- \* Loads containing cardboard or controlled waste at \$130 per tonne



# Alberni Valley Disposal



# Process





# Work Plan (1)

## 1. Diversion opportunities

- Assess/confirm diversion opportunities by material
- Review and update diversion quantities by material



## 2. Collaboration (generators, haulers and processors)

- Provide input to regulations and enforcement protocols
- Provide input to education materials
- Provide feedback on enforcement



## 3. Regulation

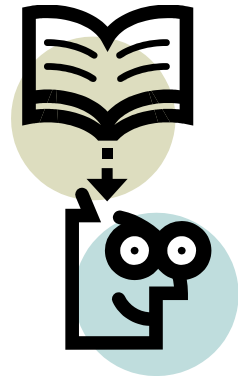
- Review current solid waste system costs and assess impact
- Review and amend current regulatory bylaws



# Work Plan (2)

## 4. Education

- Target based on results of collaboration
- Potential tools
  - Mailer to generators
  - Advertising
  - Media materials
  - Brochures/posters/flyers
  - Infraction Notices



## 5. Enforcement

- Review and amend current landfill operations contracts
- Train operations contractor staff
- Phased approach

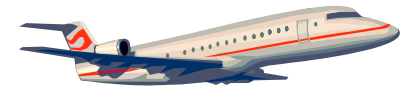


# Alberni Valley Haulers Feedback

## Attendance 8+

### \* 35,000 feet:

- Positive response – many already providing service
- Markets are good/price fluctuates



### \* Ground Level:

- Lack of information on recycling rate for large, medium and small generators
- City of Port Alberni commercial collection issues
- Start with OCC – MWP optional at first
- ACRD needs to provide education support

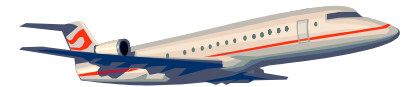


# Tofino Feedback

## Attendance 20+

### \* 35,000 feet:

- Overwhelming support – “get on with it”
- “Only a handful of businesses don’t recycle OCC”



### \* Ground Level:

- Lack of information on recycling rate for large, medium and small generators
- Confusion over self-haul/depot options for small generators
- Cost may be issue (\$0.30 per kg for ICI recyclables)

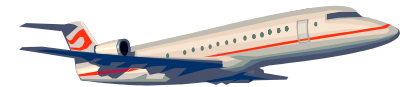


# Ucluelet Feedback

Attendance: 8 (3 restaurants)

\* 35,000 feet:

- Limited support – lack of space for container
- Recycling costs \$300/tonne – landfill costs \$95/tonne



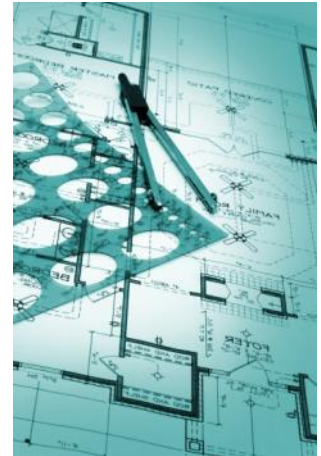
\* Ground Level:

- Meetings should be in evening
- Small generators need cost-effective collection and drop-off options
- “When busy can’t expect staff to be separating the waste streams”



# Program Design Issues

- \* Assess/confirm current level of recycling activity
  - Mini-Waste Composition Study – “Dumpster Dive”
  - Drive by assessment/information from haulers
- \* Estimate impact on tipping fees
  - Will tipping fee need to increase due to decrease in revenue?
- \* Identify/provide cost-effective diversion opportunities
  - Self-haul drop-off
  - Fees



# Draft Communications Plan

## 1. Communication

- Pre-ban stakeholders meeting
- Workshop(s)
  - ❖ Follow the leader approach
- Speaking engagements
  - ❖ Council, Chamber, ??
- Media ads/information
- Direct notice to generators
  - ❖ Hauler customer list, Chamber of Commerce etc



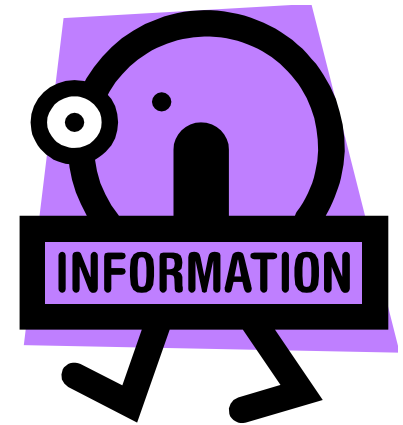
# Draft Communications Plan

## 2. Education

- OCC Ban brochure
- OCC Recycling Guide
  - ❖ What services are available (collection/self-haul)

## 3. Enforcement

- Pre-ban violation notices
- Inspection of loads
- Violation notices
- Work with hauler and generator to resolve





# WC PMAC Feedback

- \* Support for OCC Ban
- \* “Devil’s in the Details”
  - Take time to assess/confirm current level of recycling activity
  - Walk-by assessment and mini-waste composition
  - Resolve self-haul drop-off issues
- \* Revise implementation schedule ( two months)
- \* Communications plan required to build support



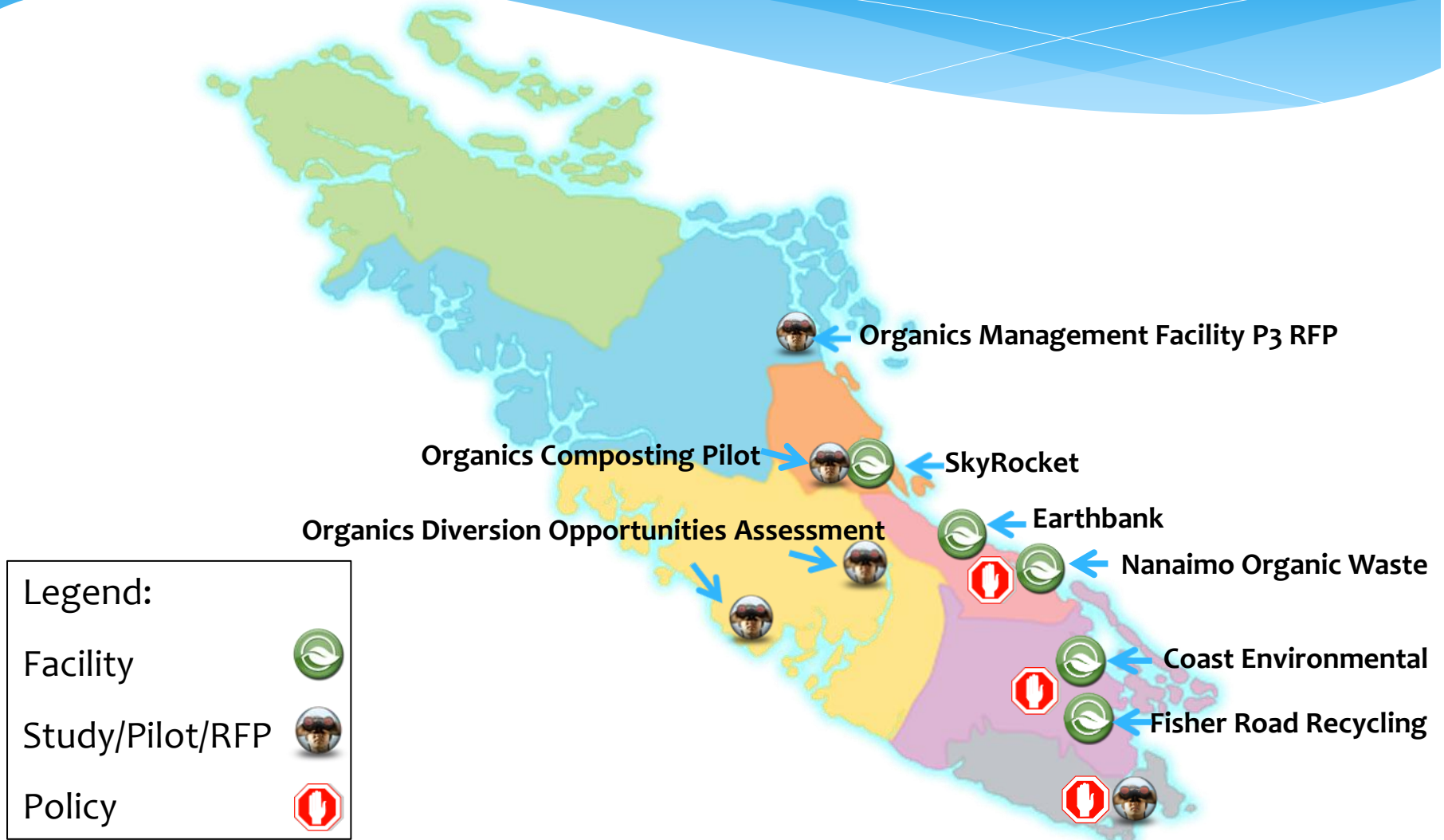
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# ICI Disposal Bans *Questions?*

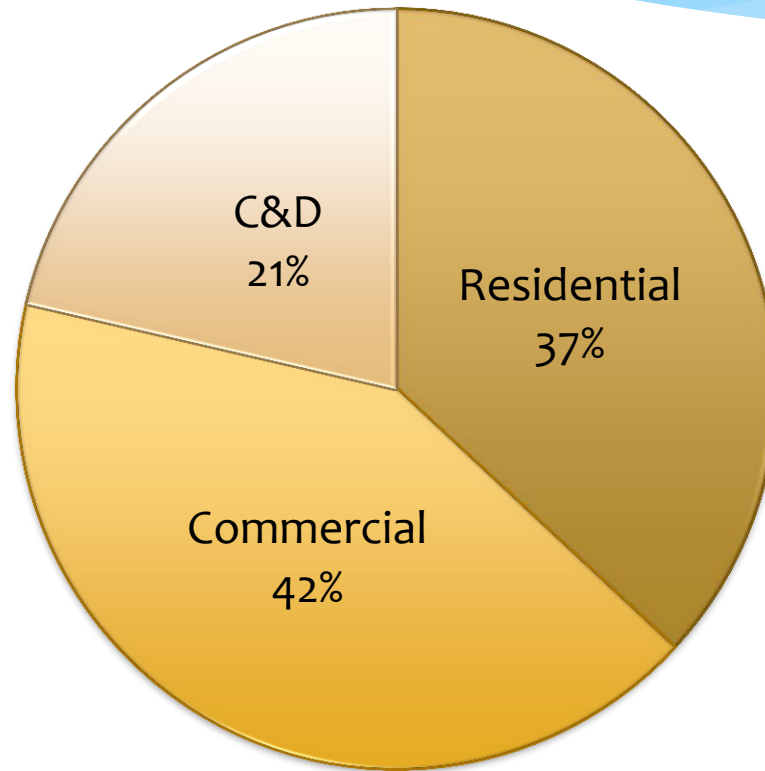
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# Organics Diversion Opportunities Assessment

# Vancouver Island Composting



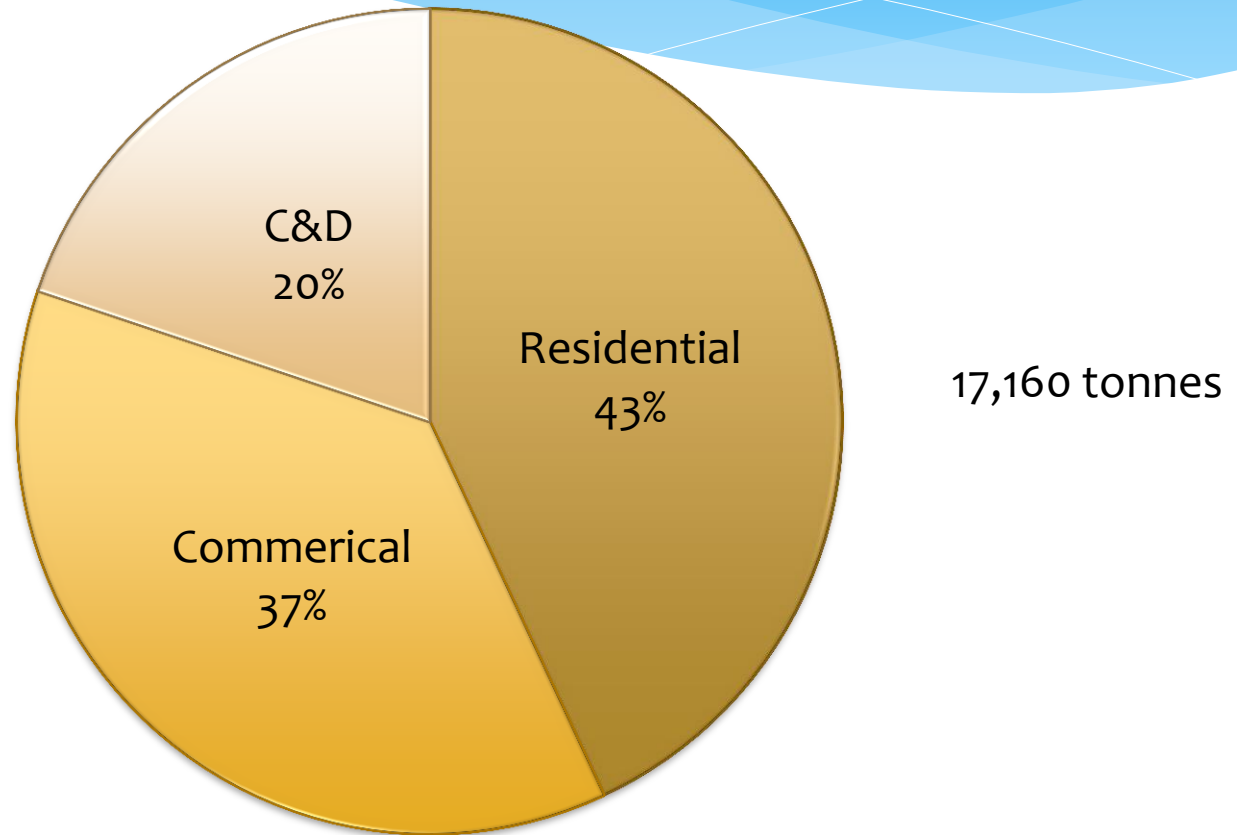
# ACRD Total Waste Disposal



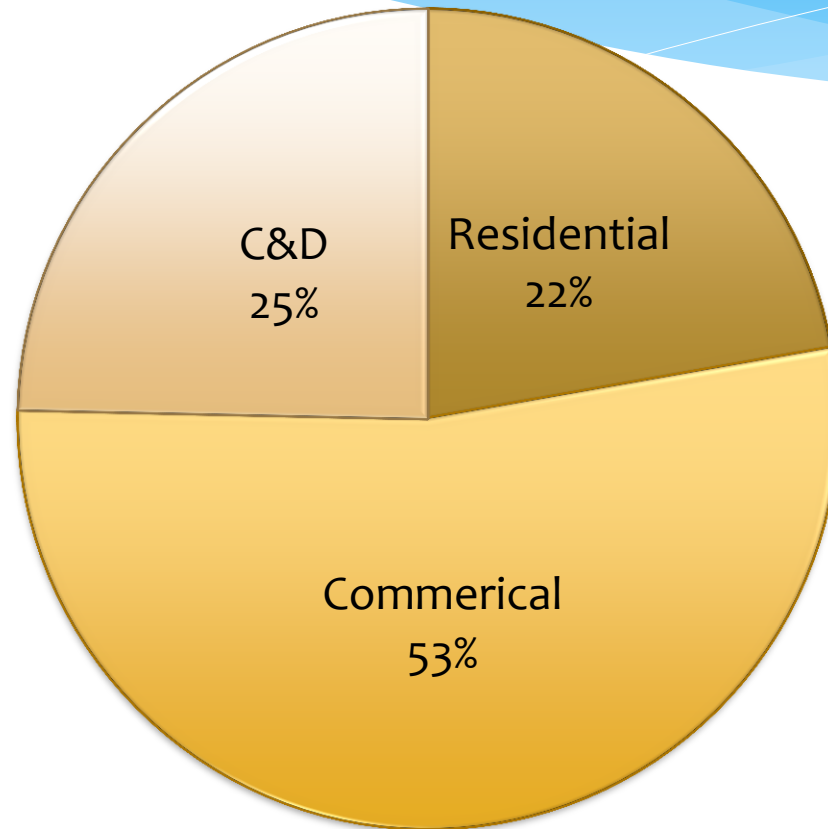
22,725 tonnes  
740 kg per capita



# Alberni Valley Waste Disposal



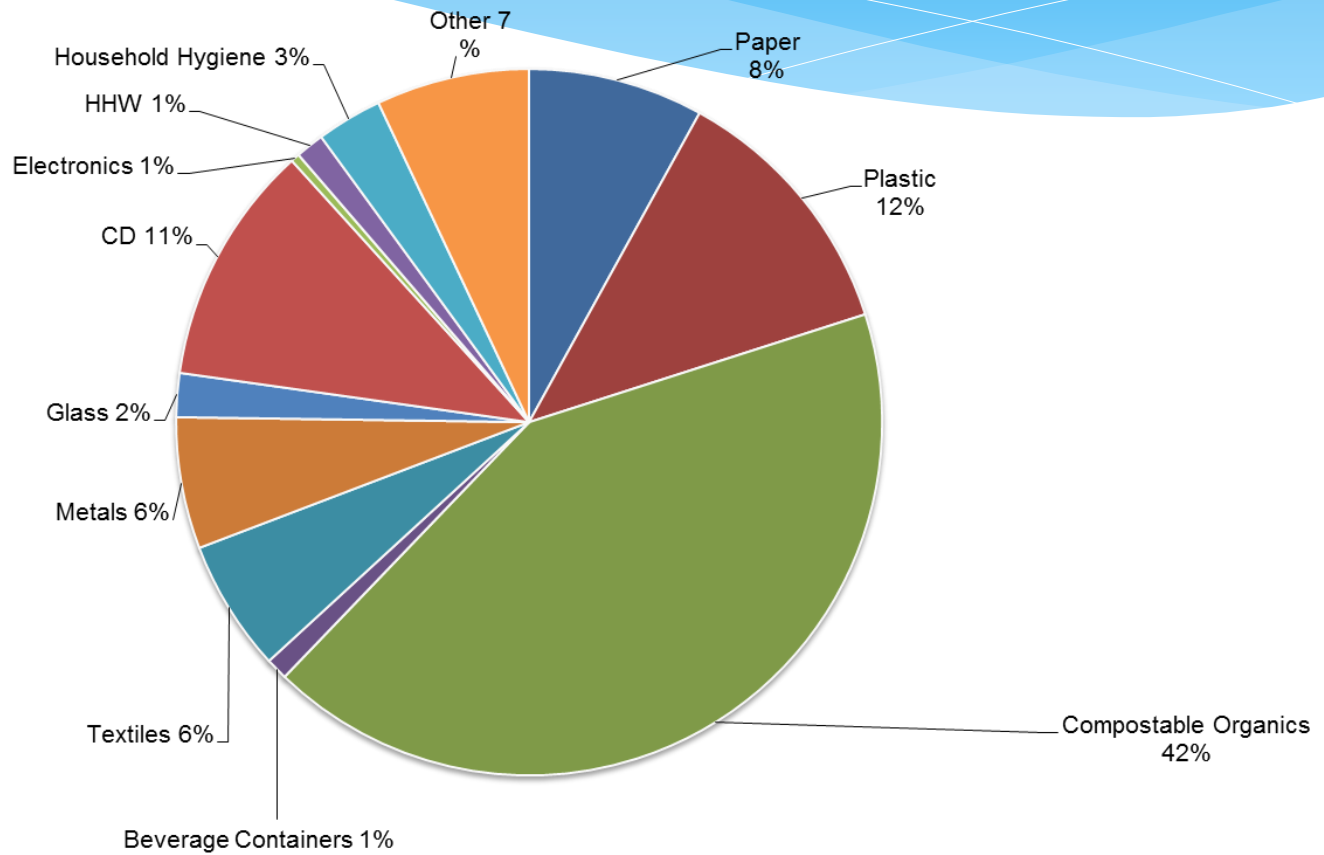
# West Coast Waste Disposal



5,565 tonnes



# RDN Waste Composition 2004





# ACRD Organic Resource

## \* Alberni Valley

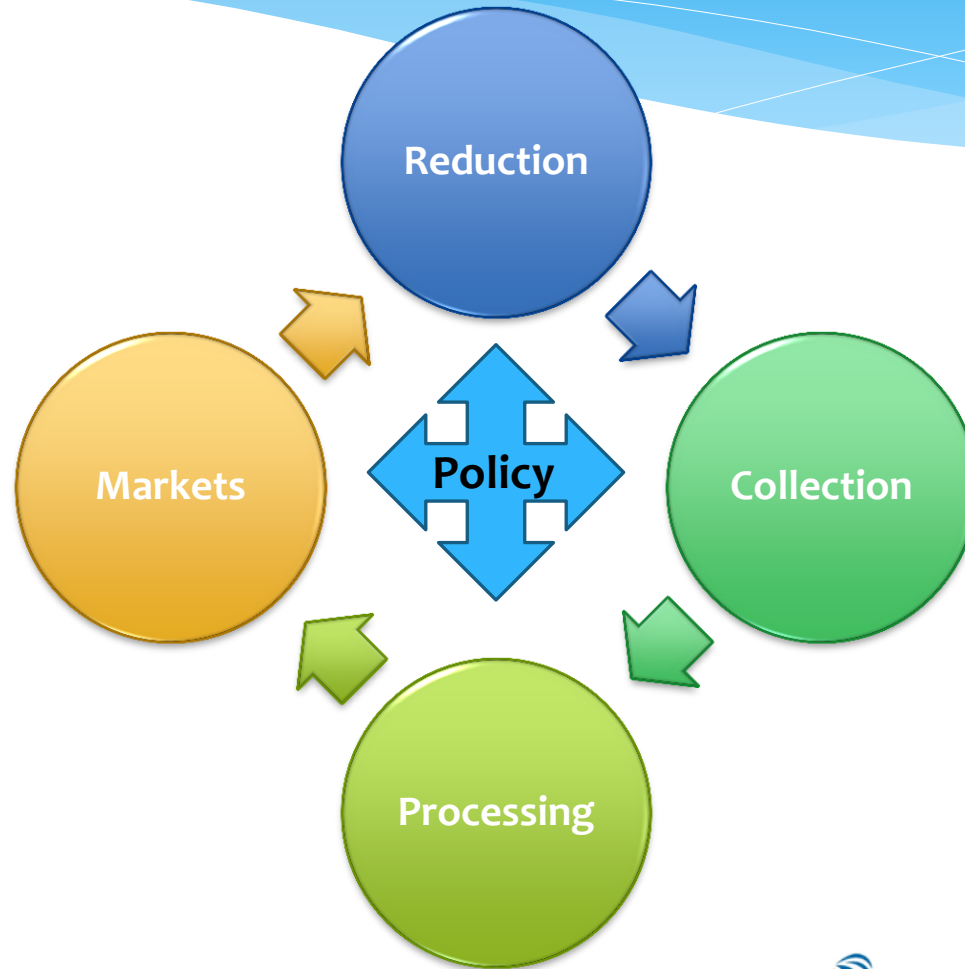
- $17,000 \times .40 = 6,800$  tonnes per year
- Includes yard waste, food waste, compostable paper
- Source ICI and Residential
- Assume 50% recovery = potential 3,400 tonnes per year
- Residential food waste only = 1,000 tonnes per year
- Landfill currently “processes” 568 tonnes of compost material

## \* West Coast

- $5,500 \times .40 = 2,200$  tonnes per year
- Assume 50% recovery = potential 1,100 tonnes per year
- Residential food waste only = 138 tonnes per year



# Assessing Opportunities



# Reduction



- \* Avoid collection, avoid processing
  - Encourage and support backyard composting
  - Love Food, Hate Waste style campaign
  - Linking large generators to users (e.g. food banks)

**LOVE**  
**FOOD**  
hate waste



# Collection

- \* What to collect
  - \* Kitchen scraps
  - \* Yard waste
- \* How to collect
  - \* Separate or combined
  - \* Curbside
  - \* Depot
- \* Target Sectors
  - \* Single-family residential
  - \* Multi-family
  - \* Commercial/Industrial
  - \* Institutional



# Processing

- \* Create your own or used an established facility
- \* Technology
  - \* Low-tech/High-tech
- \* Ownership
  - \* Contract out
  - \* Own/operate
  - \* Partnership
- \* Location





# End Markets

- \* Agriculture
- \* Erosion and sediment control
- \* Landscaping
- \* Reclamation
- \* Garden centres
- \* Topsoil Manufacturing
- \* Turf application
- \* Wholesale Nurseries



# Policy

- \* Used to support organics diversion objectives
- \* Mechanism to encourage participation in programs
- \* Encourages organic waste to be diverted to organics processing facilities
- \* Examples:
  - \* Ban commercial organic waste from landfills
  - \* Collection bans (enforced at curbside)
  - \* Yard waste and wood waste burning bans



# Organics Diversion Opportunities Assessment

1. Assess and confirm organic waste quantities
  - \* By source (ICI & residential) and by type (yard, food, paper)
2. Review and assess local opportunities for reduction, collection, processing and markets
3. Review and assess supporting policies
4. Based on assessment of local opportunities refine reduction and diversion estimates
5. Prepare high level cost estimates and cost/benefit analysis including impact on current system costs
6. Prepare PowerPoint presentation outlining results and recommendations.

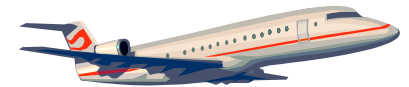




# Tofino Feedback

## Attendance 20+

- \* 35,000 feet:
  - Great idea
  - We need compost
- \* Ground Level:
  - Sectors – ICI only or include residential
  - Can OCC/paper be used in process
  - Is there enough yard waste
  - Need to close the loop – local markets

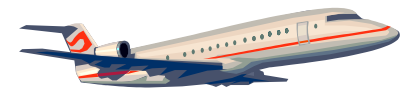


# Ucluelet Feedback

Attendance: 8 (3 restaurants)

\* 35,000 feet:

- Large generator keen (Black Rock)
- Small generators cautious



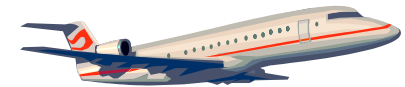
\* Ground Level:

- Need to build awareness of collection options
- Must be cost-effective
- “When busy can’t expect staff to be separating the waste streams”



# Alberni Valley Feedback

\* 35,000 feet:



\* Ground Level:



# 2014

## Plan Implementation Schedule

| Plan Component                                   | Timeline             |
|--|----------------------|
| <b>ICI Disposal Bans</b>                         |                      |
| Stakeholder Consultation                         | Nov 2014-Feb 2015    |
| Bylaw Amendment                                  | March 2015           |
| Phase-In Enforcement                             | April 2015-Sept2015  |
| Full Enforcement                                 | Oct 2015             |
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| <b>Construction, Reno &amp; Demolition Waste</b> |                      |
| Investigate markets for wood waste               | 2015                 |
| Implement Disposal Ban                           | 2016                 |

# 2015

## Proposed Implementation Schedule

| Plan Component                                   | Timeline              |
|--|-----------------------|
| <b>ICI Disposal Bans</b>                         |                       |
| Stakeholder Consultation                         | Nov 2014-April 2015   |
| Bylaw Amendment                                  | May 2015              |
| Phase-In Enforcement                             | June 2015-Dec 2015    |
| Full Enforcement                                 | Jan 2016              |
| <b>Organic Waste Diversion</b>                   |                       |
| Organics Diversion Opportunities Assessment      | Nov 2014 – April 2015 |
| Organics Diversion Strategy                      | June 2015             |
| Program Implementation                           | Sept 2015-March 2016  |
| <b>Construction, Reno &amp; Demolition Waste</b> |                       |
| Investigate markets for wood waste               | 2015                  |
| Implement Disposal Ban                           | 2016                  |

# 2015 Proposed PMAC Schedule

| Date               | Agenda  |
|--------------------|---|
| Feb 19/26<br>2015  | <ul style="list-style-type: none"><li>• ICI Disposal Bans – Progress Report</li><li>• Communications Plan Progress Report</li></ul>             |
| Apr 16/23<br>2015  | <ul style="list-style-type: none"><li>• ICI Disposal Bans – Bylaw Amendment</li><li>• Organic Waste Diversion Opportunities - Results</li></ul> |
| June 18/25<br>2015 | <ul style="list-style-type: none"><li>• ICI Disposal Bans – Progress Report</li><li>• Organic Waste Diversion Strategy</li></ul>                |
| Sept               | <ul style="list-style-type: none"><li>• Organic Waste Diversion Implementation Plan</li><li>• Wood Waste Diversion Opportunities</li></ul>      |
| Nov                | <ul style="list-style-type: none"><li>• Organic Waste Diversion Progress Report</li><li>• Wood Waste Disposal Ban</li></ul>                     |
|                    |   |



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QUESTIONS?