# REPORT TO THE PLANNING, TRANSPORTATION AND PROTECTIVE SERVICES COMMITTEE MEETING OF WEDNESDAY, MAY 23, 2012

#### SUBJECT SOIL REMOVAL AND DEPOSIT ACTIVITY

#### **PURPOSE**

This report responds to correspondence from the District of Central Saanich (Central Saanich) requesting a regional approach to inter-municipal soil relocation.

#### **BACKGROUND**

Central Saanich council has asked the Capital Regional District (CRD) to "adopt a strategy, regionally, that requires municipalities to have a fill removal and deposit plan as part of any new development that they approve" to ensure each jurisdiction involved in the activity (both the municipality from which the soil is removed and the municipality in which the soil is deposited) is fully apprised, prepared and in support of, the soil removal/deposition activity. The letter of request from Central Saanich is attached as Attachment A.

In preparation for this report, Regional Planning facilitated a regional discussion with staff from the Environmental Sustainability department, municipal planners, engineers, Provincial stakeholder agencies and the Cowichan Valley Regional District (CVRD) to inventory the issues associated with soil relocation and to explore solutions that would involve a regional approach.

The workshop was held on March 6<sup>th</sup>, 2012. The list of attendees is attached as Attachment B. The following is a summary of the issues that can arise as a result of soil relocation:

- o increased truck traffic on local roads;
- o wear and tear on municipal infrastructure:
  - (road) wear and tear
  - damage and clogging to storm drain systems:
- hydrologic concerns:
  - stream health,
  - flooding of neighbouring farms.
  - upset of the water balance and aquifer recharge,
  - removal of natural floodplains/habitat,
  - undermining of Integrated Watershed Management Plans;
- o potential contamination; and
- o poor soil quality, arable land degradation.

For greater detail on issues and perspectives identified during the workshop, see Attachment C.

# OPTIONS FOR A REGIONAL APPROACH

Three straw-model options were presented to the participants at the March 6<sup>th</sup> workshop and municipal staff were asked to explore approaches that go beyond the existing role the CRD currently plays in soil relocation (limited to receiving contaminated soils at the Hartland Landfill) ranging from "do a little bit more" to "do a lot". A summary of the three options is as follows:

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1. *Improved Status Quo Approach* proposes a focus on education, with the CRD providing some education materials for municipalities to distribute to industry.

- 2. *Moderate Approach* which proposes a two-pronged (education and regulatory) approach, including the creation of a model by-law for municipalities to voluntarily adopt.
- 3. Comprehensive Regional Approach proposes an additional prong of enforcement to the approach, including a regional bylaw with education and enforcement services.

Greater detail on the three options developed in the workshop is in Attachment D

#### **ALTERNATIVES**

- 1. Authorize Regional Planning staff to undertake the development of workplans and budget options required to action *Option 2 Moderate Approach*, for Committee's consideration.
- 2. Receive Report No. PPS/RP 2012-14 for information and that no further action be taken at this time.

# JURISDICTIONAL AND SERVICE IMPLICATIONS

While there was consensus amongst attendees at the March 6<sup>th</sup> workshop that a regional 'do little' approach would not readily address the problems identified, it is noted that the regulatory authority for soil management exists at the municipal level, not at the region.

The majority of the attendees favoured the incremental approach implicit in *Option 2 - Moderate Approach*. The development of the materials and information identified in this option fall within the Regional Planning mandate, however staff resources are fully allocated due to the work related to the RSS, several significant transportation-related projects and deer management. Moreover, the soils issue and associated workload implications have not been identified in the Business Plans for Regional Planning.

Option 3 – Comprehensive Regional Approach would involve activities that exceed Regional Planning's scope of services. Furthermore, Environmental Sustainability confirms that it is not in a position to manage excavated soil as it is not, by definition, a waste product. Environmental Sustainability therefore does not have a service within existing establishment bylaws to manage soil relocation region-wide.

# **FINANCIAL IMPLICATIONS**

The Regional Planning 2012 budget does not provide for staffing or other resources to undertaken any of the options presented.

# SUMMARY/CONCLUSIONS

Central Saanich has brought to the Region's attention, a number of important issues relating to large volume soil relocation which involve and potentially impact, all member municipalities. Staff from other municipalities in the region support the Central Saanich assertion and collectively have identified the need for a coordinated, inter-jurisdictional and inter-agency

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approach to soil relocation – both from the point of removal to the destination for deposit, to ensure all potential impacts are identified, addressed and mitigated, before remediation is required. Provincial ministry, Agricultural Land Commission staff and representatives from the Peninsula Agricultural Commission have acknowledged the need for a regionally coordinated approach that supports their respective programs.

The regulatory authority for soil management rests with local government. For the CRD to take on the function of additional regulatory authority, modifications to the establishment by-laws of either Regional Planning or Environmental Sustainability would be required, representing a fundamental shift (increase) in responsibility. If the preferred approach to managing soil in the region is to direct the CRD to assist municipalities with the development of a model bylaw, coordinated educational materials and seamless communication between and among municipalities and provincial ministries, then this approach, which could be considered as a regional information service within the mandate of Regional Planning, would require additional staff resources and budget. As the 2012 business plans and budget are already in place, it is recommended that no action be taken at this time.

#### RECOMMENDATION

That the Planning, Transportation and Protective Services Committee receive Report No. PPS/RP 2012-14 for information and that no further action be taken at this time.

"Original Signed"

Susan Hallatt, MCIP Research Planner Marg Misek-Evans MCIP Senior Manager, Regional & Strategic Planning

Robert Lapham MCIP
General Manager, Planning & Protective Services
Concurrence

Attachments: 4

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# **ATTACHMENT A – Letter from District of Saanich**

# **ATTACHMENT B – List of Participants**

MUNICIPAL STAFF
District of North Saanich
1 Mark Broderick
2 Brian Robinson
Town of Sidney
3 Mike Van der Linden
District of Central Saanich
4 Hope Burns
5 Ken Neurauter
6 Bruce Greig
7 David McAllister
District of Saanich
8 Sharon Hzodanski
9 Von Bishop

City of Victoria
10 Stephen Stern
11 Avy Woo
Town of View Royal
12 Lindsay Chase
District of Highlands
13 Chris Coates
District of Metchosin
14 Sheila McKay
15 Sherry Hurst
Juan de Fuca Electoral Area
16 June Klassen
Cowichan Valley Regional District

Ministry of Agriculture	Ministry of Community, Sports & Cultural Dev'l
18 Rob Kline	25 Heike Schmidt
Agricultural Land Commission	Citizen
19 Thomas Loo	26 Ian Vantreight
Ministry of Environment, Remediation Div	Media
20 Coleen Hackinan	27 Vivian Moreau
21 Kerri Skelly	CRD Regional Planning
Peninsula Agricultural Commission	28 Marg Misek-Evans
22 Bob Maxwell	29 Sue Hallatt
23 Mike Romaine	CRD Environmental Sustainability

17 Kate Miller

30 Dale Green

**OTHER ATTENDEES** 

24 Holly Armstrong

**Canadian Food Inspection Agency** 

**STAKEHOLDER AGENCIES** 

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# C - Summary of Workshop Findings Regional Discussion on Soil Relocation Issues in the CRD March 6, 2012

The following is a summary of the findings generated during the workshop:

#### **SCAN OF ISSUES**

- Generators and receivers. Soil relocation issues fall into two categories: whether the soil is being extracted (soil generating sites) or being deposited (soil receiving sites). Both activities can be regulated through permitting subject to a Soil Removal and Deposit Bylaw, however, practically permits are not issued for excavation and only inconsistently for fill requests. Not all municipalities have Soil Removal and Deposit Bylaws. Small volume soil relocations do not typically create issues. An example of a small volume generating activity is the excavation for a single family dwelling. Small volume fill activities may include laying of road base for a driveway or hard pack preparation for an out-building on rural lands.
- Large volume activities. Large-scale urban developments have historically trucked fill
  to the Cowichan Valley Regional District (CVRD), but increased trucking costs and
  profitability of dumping fees for some landowners has resulted in large-scale deposits
  properties on the peninsula, the Highlands, Metchosin and Juan de Fuca. When the
  volumes are significant, (some reports suggest volumes exceeding 1000 truck loads on
  a single site) the impacts can include:
  - o increased truck traffic on local roads;
  - o wear and tear on municipal infrastructure:
    - (road) wear and tear
    - damage and clogging to storm drain systems:
  - hydrologic concerns:
    - stream health,
    - flooding of neighbouring farms,
    - upset of the water balance and aquifer recharge,
    - removal of natural floodplains/habitat,
    - undermining of Integrated Watershed Management Plans;
  - o potential contamination; and
  - o poor soil quality, arable land degradation.
- Rural and urban concerns. Soil relocation issues affect rural lands agricultural and non-agricultural lands, and urban lands. Where soil deposits involve Agricultural Land Reserve (ALR)lands, the Agricultural Land Commission (ALC) issues the permit. The exception to this rule is the District of Central Saanich, which has recently amended its soil bylaw to include ALR land in its permitting process. In Central Saanich, the ALC is a referral agency in the municipal approval process. The main issue surrounding fill deposits on ALR is the ability of the ALC or permitting agency to discern when a fill activity is a legitimate farming practice and when it constitutes dumping that is detrimental to land and/or local hydrology.

The ALC does allow soil deposits that support farm use. For example, road base for a driveway, gravels for housing, small-scale drainage berms. On occasion, the "right to

farm" argument is made for large fill applications that make the legitimacy of the application difficult to discern. For example, a landowner may purchase land that is suitable for one crop, but wishes to substantially change the nature of the site to make it suitable for an alternate crop.

• Contaminated soil. In urban areas, oversight of contaminated soils is under the jurisdiction of the Ministry of Environment. Once soil has been identified as contaminated, there is a rigorous process of remediation. However, there is a gap in procedure for identifying potentially contaminated sites – i.e. where former land uses might have resulted in toxic spills.

The current regulatory system for soil removal and soil deposit activities fall short of addressing the issues described above.

#### JURISDICTIONAL AND REGULATORY PERSPECTIVES

#### **Municipalities**

Central Saanich has just completed the amendment of soil deposit and removal bylaw to include ALR Land. Other municipalities with ALR may wish to follow suit. This requires the province to approve the transfer of responsibility. Although the Central Saanich application took two years to get the approval, the precedent has been set, and subsequent applications may go more smoothly. This amendment however addresses only one aspect of the myriad of issues related to soil relocation. Missing from these proposed amendments, and germane to the Central Saanich request for a regional approach, is communication with the neighbouring jurisdiction from which the soil is removed. Central Saanich has expressed a desire to link the two or more jurisdictions involved in soil relocation to effectively address the issues and concerns identified above.

#### **Provincial Ministries**

As urban developments increase in size and complexity, issues relating to the quality and volume of the soil removals have been noted by the Ministry of Environment (MoE), Land Remediation office, which is charged with oversight of contaminated soil relocation. MoE staff have expressed a need for inter-agency cooperation in developing protocols for routinely screening soil extraction activities in an effort to identify potentially contaminated sites. Ministry staff suggested that by taking a collaborative approach to soil movement in the region, many contamination issues could be effectively managed and mitigated.

#### **Agricultural Land Commission**

The ALC is aware of, and considers illegal, the placement of fill in the ALR that "causes danger on or to adjacent land, structures or rights of way, or.... fouls, obstructs or impedes the flow of any waterway" (excerpt from Ministry of Agriculture Factsheet 800 Series). However, limited ALC staff resources prevent effective monitoring and enforcement. A coordinated approach would help to close gaps and improve communication amongst agencies.

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# **Neighbouring Jurisdictions**

The CVRD has been the recipient of large volume soil deposits originating from development projects in the CRD for many years and the Environmental Sustainability department has identified significant issues relating to contamination, water-balance and habitat destruction. The vastness of the area makes monitoring soil deposit activity very difficult, and as such, they have expressed an interest in participating in the development of a coordinated inter-regional approach.

#### **Regional Coordination**

The issues relating to soil relocation that are regional in scale, can involve different agencies and interests ranging from waste management (when soil is not viewed as a resource but rather a waste product of development) water-balance concerns, to contamination issues. The CRD has existing mandates which touch on these areas such as:

- Oversight of a regional approach to stormwater management by way of the Integrated Stormwater Management Plan (ISMP)
- Stormwater contaminant monitoring and watershed protection in 11 municipalities and the three electoral areas through liquid waste management plans and establishing bylaws.
- Hartland Landfill is a receiver site for some contaminated soils as well as noncontaminated by hard-to-place materials (deep, impermeable clays)
- Environmental Partnerships division has expertise in developing and delivering education materials on a cross-section of topics.

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# ATTACHMENT D – Workshop Findings: Summary of Regional Approaches Explored Regional Discussion on Soil Relocation Issues in the CRD March 6, 2012

### OPTIONS FOR A REGIONAL APPROACH

Three straw-model options were presented to the participants at the March 6<sup>th</sup> workshop and municipal staff were asked to go beyond the existing role the CRD currently plays in soil relocation ranging from "do little bit more" to "do a lot". Currently, the CRD interacts with soil relocation by way of the Hartland Landfill, as a provincially certified "receiving facility" for contaminated soils, Hartland takes materials that cannot be accepted by other certified receiving agencies. In addition, Hartland occasionally accepts soils that are needed to operate the site, such as deep clays to build landscaped containment walls.

The following is a summary of the three approaches that were developed by municipal staff at the workshop:

#### 1. Improved Status Quo Approach.

This option focusses on the Region collating and distributing materials to municipalities that would improve communication between municipalities and among provincial agencies and to assist with education among contractors and trucking industry members.

#### Key elements include:

- Make available an MoE generated map of all the registered remediated sites via the CRD Intra-Municipal map
- Develop and share the contact list of each municipality's designated "soil conservation officer" or equivalent
- Develop a best practices guide (educational brochure) for industry / business, First Nations and other Federal land owners
- Develop policy and protocols for CRD Operations crews where soil relocation activity is undertaken

# Anticipated outcomes include: include:

- Improved communication between municipalities
- Increased profile of the issues relating to soil relocation
- Efficiencies derived from a collective approach to research, utilising staff resources
- Some budget implications to produce materials

# 2. Moderate Approach

The intent of this option is to close the communication gap between municipal generators and receivers and provides a common set of rules for operators and landowners across the region.

#### Key elements include:

- A 3-part coordinated approach to soil relocation
  - o Regulation: involving the creation of a model Soil Removal and Deposit Bylaw for municipalities to voluntarily adopt or 'do better'.

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- Education: involving the creation of template contracts for excavators and haulers, for both generating activities and receiving activities, in addition to the best practices brochure material described in Option 1.
- Enforcement: involving the purchase and re-distribution of "Soil Watch" road-signage to municipalities to encourage citizens to report soil activity

#### Anticipated outcomes include:

- Municipal staff support. (The majority of the participants in the workshop favoured this option as a good first step to see if this level of effort could address the issues identified.)
- Staff and financial resources will be required to implement this option as they cannot be integrated into existing CRD workplans
- Closes the communication gap between municipal generators and receivers
- Provides a common set of rules (predictability and consistency) for operators and landowners across the region,
- Potentially greater involvement with First Nations, Airport Authority etc.
- Coordinated approach to involvement with provincial regulatory agencies
- Involves residents to assist in identifying and reporting on soil activity

#### 3. Comprehensive Regional Approach

Workshop participants tasked with developing a fully regional approach to soil management suggested that one regional bylaw would need to be developed, with permit management, monitoring and enforcement responsibilities housed within the CRD.

#### Key elements to a Comprehensive Regional Approach

- Develop and adopt a Regional bylaw
- Establish enforcement and compliance process and delivery
- Institute fees for trucking to generate royalties for cost recovery
- Deliver education and outreach programmes
- Identify sites within the region that are suitable for fill deposits

# Anticipated outcomes include:

- Combines rigorous regulation with enforcement and education resulting in likely, significant mitigation of identified issues
- Will reveal the 'bad actors' and provide recourse
- Directs contractors to appropriate locations, recovers soils that are a potential resource
- Efficiency of staff resources come from a coordinated approach; benefits of dovetailing programming and enforcement to other CRD outreach and bylaw compliance operations.
- This option would require the creation of a service.
  - Although some of the participants felt this level of action was warranted, most municipal staff felt the option would be too costly and implementation too complex for an initial approach.

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#### **MUNICIPAL STAFF FEEDBACK**

There was consensus amongst attendees at the March 6<sup>th</sup> workshop that a 'do little' approach would not readily address the problems identified. However, the majority of the attendees felt that an incremental approach be taken, beginning with the tools and materials identified in the *Option 2 - Moderate Approach*. It was felt that the three-prongs of regulation, education and communication expressed in Option 2 are expected to have a significant impact on stopping the most impactful activities before the damage is done. In addition, several of the municipalities had identified their own need to update their respective Soil Removal and Deposit Bylaws, so having a model bylaw developed on their behalf was thought to be helpful. It was recommended that in time, the intergovernmental group re-convene to review the success of the approach, identify any gaps, and to explore efficient and effective measures to address the problems.