Drain Review Protocol, A Marrying of Processes (Fisheries Act/Drainage Act)
Presentation by Norm Smith, Impact Assessment Biologist, Fisheries and Oceans
Canada, Ontario-Great Lakes Area, Sarnia District Office)

1) INTRODUCTION:

The Drain Review Protocol represents a work in progress (as of October 25, 2002, the
time of 34th Drainage Engineer’s Conference at the University of Guelph) and is being
presented to provide an update to those in the agricultural drainage sector. The Draft
Drain Review Protocol is the product of a multi-organizational approach that identifies a
process to meld the processes outlined under the Ontario Drainage Act with the review
processes associated with the Canada Fisheries Act. This protocol pertains specifically to
procedures outlined in the aforementioned legislation with specific reference to those
projects coming under S 4 (petition) and S 78 (improvement) of the Drainage Act.
Processes linked to other legislation are not addressed in this Protocol.

The Drain Review Protocol was initiated in response to problems being experienced by
both agricultural drainage practitioners who were adhering to procedures outlined in the
Ontario Drainage Act and those who reviewed such proposals for fish habitat concerns
under the Canada Fisheries Act. Some of the specific concerns that were identified
include some of the following:

- On-site meetings organized by Drainage Engineers for drain maintenance/new drain
  construction projects were often not attended by agency staff (Conservation
  Authority, Fisheries and Oceans Canada, Ontario Ministry of Natural
  Resources) responsible for the review of such projects. Consequently timely advice and early
  input to the project did not always occur.

- Agency staff receive many notices pertaining to on-site meetings of drain
  construction/maintenance projects and often had no way of knowing which ones
  should be attended versus those where their presence was not essential. The
  underlying problem was that there existed no effective means of screening incoming
  requests for on-site meetings.

- Fisheries and Oceans Canada staff have occasionally not been brought into the review
  process in a timely manner. This has lead to delays in getting the project reviewed
  and an authorization of the Harmful Alteration, Disruption or Destruction (HADD) of
  fish habitat under section 35(2) of the Fisheries Act (if required) issued. In some
  instances, the Engineer’s Report has been finalized and submitted to the municipal
  Council before an authorization of the HADD of fish habitat has been issued. If
  additional changes to the project are required at this stage in order to get the HADD
  authorized, then additional costs to the project can occur.

- Overall, there exists an inadequate understanding of the procedures followed by one
  group of the processes followed by the other group (i.e., drainage practitioners of the
  environmental review procedures, Fisheries Act and agency staff of the procedures
  outlined in the Drainage Act).

- The bottom line is that many of the problems that have occurred in past years can be
  attributed in large part to inadequate communication going both ways.
The Agricultural Working Group of the Fish Habitat Advisory Group (to Fisheries and Oceans Canada) recognized the aforementioned problem and established a task team to address it. This task team represented various disciplines with membership and affiliations as follows:

- Geoff King (Maitland Valley Conservation Authority and Drainage Superintendents Association of Ontario)
- Jeff Dixon (Maitland Engineering, a division of R.J. Burnside and Associates and Chair of the PEO-Land Drainage Committee)
- Erica Coulson (Ministry of Natural Resources, Clinton Area office)
- Sid Vander Veen (Ontario Ministry of Agriculture and Food)
- Dana Boyter (Fisheries and Oceans Canada, Burlington District)
- Norm Smith (Fisheries and Oceans Canada, Sarnia District)

2) DRAIN REVIEW PROTOCOL OVERVIEW

The Drain Review Protocol that has been developed (draft as on October 25, 2002) merges or “marries” the processes outlined in the Ontario Drainage Act and the Canada Fisheries Act (Appendix 1). Processes covered through other legislation are not included in this protocol although some of the procedures that have been identified could be used for these purposes. The Protocol also provides a mechanism whereby key “triggers” can be identified so projects requiring an on-site visit by agency review staff can be flagged early in the process so that attendance by these staff can be arranged. The Protocol also addresses the need of providing a mechanism for improving communication among all parties.

The Drain Review Protocol will enable municipalities and review agencies to receive more detailed information at the early stages of a project (Drain Improvement Request/New Drain Petition Supplement). Information provided at this stage will enable municipalities and review agencies to gain a better appreciation of where the proposed work will occur and what the general nature of the work will likely be (important to identify triggers for on-site visits). The Drainage Engineer will also be required to provide specific information through the Fish Habitat Evaluation Form to the review agencies to enable a timely initial review of the project proposal and start the more formal review process if required. Further details on the information requirements are outlined in the following sections.

If the Protocol is adhered to, an authorization of the harmful alteration, disruption or destruction of fish habitat associated with drain construction under S 35(2) of the Fisheries Act will occur prior to the Engineer’s Report being finalized and sent to Council.
3) NEW DRAIN PETITION SUPPLEMENT AND DRAIN IMPROVEMENT REQUEST FORMS

This form is to be completed by the landowner requesting the work and/or a municipal representative (most likely the Drainage Superintendent) to provide the following information:

- Contact names (landowner and municipality)
- Location of proposed drain works
- The type of work proposed (e.g., construction of new open channel, realignment of an existing open drain, replacement of an existing tile municipal drain, deepening or widening of an existing watercourse that is not currently a municipal drain, deepening or widening of an existing municipal drain, construction of a new tile drain, closing in of an existing open channel, new or replacement drain crossing and the very popular “other”).
- The length of the proposed work (relates to work and impact zones with the impact zone defined as that length occurring downstream for one kilometre from the bottom end of the work zone).
- Identification of any significant features associated with the drain.
- Submission of a map indicating where the proposed work will occur.

4) FISH HABITAT EVALUATION FORM

This form is to be completed by the Drainage Engineer to provide the following information:

- Verification of much of information provided on the aforementioned form (e.g., verifying that the length of project, classification of drain if applicable).
- Project description including site dimensions, maps.
- Information on navigability of drain (very cursory).
- Description of riparian and instream vegetation
- Potential impact of project on banks and on vegetation (instream, bank, riparian).
- Composition of bottom substrate (e.g., clay, gravel, cobble, etc.).

5) CONCLUSION

The Draft Drain Review Protocol was presented at this conference to provide an update on the status of this initiative and to give those wishing to provide comments an opportunity to do so. Once finalized, this Protocol will be printed on a poster and will be distributed to a broad audience including agency review staff (Fisheries & Oceans Canada, Ontario Ministry of Natural Resources, Ontario Ministry of Agriculture and Food, Conservation Authorities); Municipal Representatives (e.g., Drainage Superintendents); Drainage Engineers and Contractors. Examples of typical mitigation measures as well as possible habitat compensation techniques are being considered for inclusion on this poster.
APPENDIX 1: DRAFT DRAIN REVIEW PROTOCOL (SCHEMATIC FLOW CHART)

Drain Review Protocol

Petition or Improvement Request and Supplement Filed with Council

Council Accepts Petition/Request and Supplement

No

Council Sends Petition/Improvement Request and Supplement to CA and MNR

Yes

Project Terminated (Subject to Appeal to Tribunal)

CA* Completes Preliminary Assessment and Provides Letter of Response Within 30 Days

Council Appoints Engineer

On Site Meeting

Petition Valid (54)-Petition Request (373)

Project Acceptable-Verifiable

Engineer Writes Section 40 Report

CA Completes Timely Review of Fish Habitat Evaluation Form Upon Submission

Yes

Fish Habitat Evaluation Form Completed

No

Will Potential Project Include Any of the Following Work:
- * A Natural Watercourse Not Already a Drain (Including Drain Extensions)
- * A Class D or E Drain
- * The Closing of an Existing Open Drain
- Wetlands

Does Review Agency Attend On Site Meeting?

Yes

Within 30 Days of CA
Completes Preliminary Assessment and Provides Letter

Fish Habitat Screening Process
Fish Habitat Review Process

1. Is Fish Habitat Present?
   - No: End
   - Yes: Is the project likely to result in a HADD of Fish Habitat?
     - No: Return to P1
     - Yes: Prepare Draft Design Mitigation Plan in consultation with CA* (May be part of preliminary report).

2. Complete Application for Fisheries Act Authorization
   - No: End
   - Yes: Engineer initiates CEAA Review (if necessary).

3. Is the HADD Acceptable?
   - No: End
   - Yes: DFO initiates CEAA Review (if necessary).

4. Plan reviewed by CA*
   - Can the HADD be Mitigated?
     - No: Plan sent to DFO.
     - Yes: Let letter of Advice Prepared by CA*
       - CA provides Permit if applicable and informs proponent that other permits may be required (e.g., MNR).

5. Fish Habitat Mitigation Measures and Finalizes Report
   - No: End
   - Yes: Engineer incorporates Mitigation Measures and Finalizes Report.


Note:
* Reference to CA means a Conservation Authority with DFO Review Authority. If no CA exists then MNR.
* Yellow refers to Actions of the Municipality and Engineer.
* Blue refers to Actions of the Review Agencies.