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THE CASE OF WATER PRICING

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ABSTRACT

Currently, the infrastructure in many Canadian municipalities that helps to deliver quality water to households and subsequently transport the waste water produced is in need of major capital re-investment. Estimates made by Environment Canada show that some \$4.59 billion per year will be required in order to maintain existing levels of water supply and quality, and to meet future needs over the next 10 years. Governments at all levels will have to make decisions on how to fund such undertakings. One of the options available to municipal officials will be to pass on some or all of these costs to the consumer of the services. One interesting question concerning this policy alternative relates to the willingness of consumers to pay increased water charges. This paper reports on results of a study to probe this question, carried out jointly by Environment Canada and the University of Guelph. The study, which employed a contingent valuation methodology, found that the average willingness-to-pay to assure adequate water servicing was just over \$26.00 per month, over and above current water servicing prices. At this level, the municipal water industry would generate an additional \$3.5 billion annually, a large portion of the extra revenue required. The public policy implications of this finding are discussed in the concluding section of the paper.

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1. INTRODUCTION

The provision of safe, clean water and adequate waste water treatment[1] is one of the most important of municipal functions. Not only do most activities in municipalities depend on adequate levels of water servicing, the state of public health is also directly related to such servicing. This paper examines the concept of willingness-to-pay for water services in view of the financial constraints facing public services in general, and public water services in particular.

The paper begins with an overview of an industry in financial crisis, the main characteristic of which is an inability currently to raise sufficient revenues to assure adequate service. This overview, based on recent work by Tate and Lacelle (1995) of Environment Canada, defines the nature of this financial crisis, and looks at the application of full-cost, user-pay pricing as a means of solving the crisis. Next, we turn to the main issue of the paper, an estimation of consumers' willingness to pay (WTP) to ensure that the current levels of public water services do not deteriorate. This WTP is couched in terms of the additional amount consumers have stated they are willing to pay, over and above their current payments for water services. The findings reported here are based on data gathered in a national-wide survey of 1511 Canadian households in January 1996. The empirical section of the paper, accordingly, summarizes (a) the contingent valuation methodology (CVM) underlying the survey, (b) CVM techniques used in this study, and © the results obtained. The paper concludes with a commentary on the usefulness of the CV methodology in the context of municipal water

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[1]Water provision and waste water treatment are considered here as an integrated function, referred to throughout the paper as "water servicing".

pricing, and the implications of the present experiment for public policy in the municipal water infrastructure field.

2. THE WATER INFRASTRUCTURE FINANCING PROBLEM

By Canadian standards, the municipal water servicing industry is a large one. Its in-ground assets are valued at over $100 billion in 1984 (MacLaren, 1984), located in over 1,500 municipalities of over 1,000 persons. Its annual revenues were estimated at $3.3 billion nationally (Tate and Lacelle, 1995) . The industry pumped a total of 13.8 million cubic metres of water per day in 1994, supplying 21.7 million persons, and treating the sewage of 19.6 million persons.

The parameters of the financial problem were described in detail most recently by the Federation of Canadian Municipalities (FCM, 1985). The more important of these parameters were: revenues that failed to cover the full costs of operation, substantial cross-subsidies both from other levels of government and among user groups, a declining base of support from municipal public works budgets, and an increasing unwillingness by senior governments to transfer money to water utilities. Underlying these trends were many unmetered water service connections, very low water prices to consumers and an excessive level of water usage. These characteristics persist currently, and, if anything, are even more serious. For example, the national average monthly cost per residential connection is $21.50, with the costs for many municipalities as low as $10.00. The facts that prices are low and that only about 50% of connections are metered have produced a per capita water use that is among the highest in the world. This, in turn, has escalated both capital and operation and maintenance (O&M) costs - significant wastes of public funds.

Maintaining, renovating, and upgrading water infrastructure poses at least two vital economic questions. First, how much will it cost to achieve an adequate level of water servicing? And second, given the current trends to decreasing expenditures from public sources, where is adequate funding to be found?

2.1 The Magnitude of the Financing Problem

Compiling comprehensive estimates of the potential costs of adequate municipal water services on a Canada-wide basis is a challenging exercise under any circumstances. Costs are municipality- and analyst-specific. Allowance has to be made of a tendency to overestimate costs - by municipalities themselves in the hope of larger grants from elsewhere, by consultants hoping for large contracts, and by a traditional tendency to overcapitalize water systems. The most recent effort to estimate cross-Canada costs for water and wastewater system adequacy is contained in Tate and Lacelle (1995). This report estimated the total marginal capital plus O&M costs at $4.6 billion ($1991) annually over a 10-year "catch-up" period and $ 1.8 billion thereafter[2]. The term "marginal cost" here means the costs to be incurred over and above current and planned expenditures. This amount of money could be raised by means of user charges using a three-fold action plan - a doubling of average monthly charges per connection

[2] Space does not allow this estimate to be detailed here. The reader is referred to the Tate-Lacelle report for complete documentation.

for all users, the addition of an 80% sewer surcharge, and the complete metering of all connections to municipal systems. For an average residential connection, such a program would add about $35.00 to a monthly water bill. The question posed in this paper is whether the estimated WTP comes close to this amount. An answer either way has important public policy implications. It is to an estimate of this WTP that the paper now turns.

3. ESTIMATING THE BENEFITS OF MAINTAINING WATER SERVICES

3.1 CVM Applied to Water Services

The economic value of most traded goods, such as cars or houses, is represented by the prices consumers are willing to pay for them in competitive markets. Since most environmental goods such as water quality are not traded commodities, market prices are not available for use as measures of the economic value of improvements to these amenities.

The contingent valuation method elicits from a relevant sample population, people's economic valuation of a non-marketed good, based on their responses to a carefully designed questionnaire. The questionnaire defines the precise nature of the good that is to be offered via a hypothetical market. Respondents are offered the opportunity to "purchase" the good using a cash-valued payment vehicle, such as increased taxes, user fees, or some other payment method. Ranges of offer amounts are used over the survey sample to develop a data set from which a statistical estimate of individual maximum WTP can be derived. Individual WTP can then be aggregated to approximate measures of welfare changes of the relevant population, due to provision of the non-marketed good. Freeman (1993) provides a good review of the economic theory regarding the use of WTP to measure individual and aggregate benefits of non-market goods and services. Mitchell and Carson (1989) give a thorough discussion of CVM.

Recent applications of CVM to ground water quality issues include the determination of option prices for ground water protection in Cape Cod, Massachusetts (Edwards, 1988), and Dougherty County, Georgia (Sun, 1990); WTP for improvements in drinking water quality in Georgia (Jordan and Elnagheeb, 1993) and the determination of the WTP for ground water protection in Dover, New Hampshire (Shultz and Lindsay, 1990). Mean values for this group of studies range from $121 to $641 ($U.S.) per household per annum. In Australia, the CVM has been used to measure Yass District ratepayers' willingness to pay for improvements to the quality of domestic drinking water (Carlos, 1991) and to maintain drinking water quality in Sydney both now and in the future (Dwyer, 1991). Mean values reported for these studies range from $24 to $67 ($A) per annum. Differences in WTP in these studies reflect different definitions of the marginal improvements offered and differing existing levels of water charges, among other things.

3.2 CVM Techniques Used in This Study

This study was designed to investigate at what dollar amount the Canadian public would be prepared to support, through a user-pay approach, a water infrastructure improvement program that would prevent an otherwise inevitable decline in water services. The survey was administered by phone with professional interviewers at the firm Angus Reid.

The study used a referendum as a hypothetical market, in which a majority rule criterion applied. Each respondent was told that a majority "yes" vote would cost their own household a given dollar amount \$ B per month in increased user fees for water services. A majority "no" vote would mean that the program would not be implemented, and no one would be charged. Respondents were asked to cast their vote based on the value of the program to them relative to the amount they would be charged in the event of a majority "yes" vote. The question as stated by the interviewer to the respondent was [3]

Would you be willing to support a program to conserve water

by repairing water distribution and sewage treatment systems in Canada,

if it cost your household an additional \$B each month?

This type of binary response CVM question format is known as dichotomous choice (DC). The DC referendum format is preferred by many practitioners because strategic response bias is mitigated. In addition, this study used a double-bounded technique, as described below, to increase the statistical efficiency of resulting WTP estimates.

Consistent with utility maximization theory, WTP corresponds with the expected benefit the consumer would receive from the purchase of the good or service (Hanemann, 1984). It is assumed that a "yes" response to an offer amount \$ B indicates that \$ B $\leq$ the consumer's maximum WTP. We would also expect that the respondent would support any other bid less than \$ B if he/she supports \$ B.

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[3] In addition to this question, other socio-demographic information was obtained from each respondent. A copy of the entire questionnaire is available upon request from the authors.

This study used a double-bounded logit model, in the manner outlined in Hanemann et al (1991). This means that a second question was asked of each respondent, conditional on their response to the first. In the case of a "yes" response to the first question, the individual was then asked if he/she would pay a second, higher amount, $ B^h for the program. If the response to $ B^h is "no", we can conclude that $ $B^h >$ maximum WTP. If the response to $ B^h is "yes" then it is assumed that $ $B^h \leq$ maximum WTP. In the case of a "no" response to the initial offer amount, a second lower amount, $ B^L is offered. If the second response is "yes", then it is concluded that $ B $\geq$ maximum WTP > $ B^L. If the second response is "no", then it is concluded that $ $B^L >$ maximum WTP.

WTP is generally assumed to be distributed logistically. If $ B is close to zero, fewer people are likely to respond "no" and the probability of a "yes" response is high. As $ B gets larger, the probability of a "yes" response declines, and asymptotically approaches a lower bound. Since it is assumed that a "yes" to any amount implies that an individual would vote "yes" to any lower amount, the probability distribution of a "yes" traces out a cumulative density function (cdf). A property of a cdf is that its expected value is the area under it. Thus, the mean WTP for the water conservation program is measured as the area under the estimated cumulative density function for WTP. The mean WTP can then be aggregated over the population of households in Canada for an estimate of the total value of the proposed water quality program.

3.3 Survey Development, Pretesting and Piloting

Survey development proceeded interactively through the course of several rounds of pretesting. During early stages, the description of the water infrastructure program was developed to ensure that respondents understood the good and the payment vehicle. The role of the water infrastructure survey was initially to serve as part of a much larger CVM experiment, in which half of the respondents to a second CVM survey on an unrelated topic were given the water infrastructure questions before the second CVM question. The other half only received the second CVM question alone. The goal was to determine whether the multiple valuation tasks would influence results of the second CVM. The original experiment included an open-ended pre-test which yielded a prior estimate of the WTP distribution. This distribution was used to generate bid amounts for a double-bounded dichotomous choice pilot survey. The results of the pilot survey were used to refine bid amounts in the final version of the first CVM study.

The final version of the water survey was incorporated into an omnibus survey administered during January, 1996 by Angus Reid. A total of 1511 Canadian households were selected via random-digit dialling techniques, stratified by census subdivision to be representative of the Canadian population. There was some concern about including the CVM as part of an omnibus, over which we had no control over other questions. However, the mean WTP for the first survey, carried out in April 1995, was $27 per household per month, which compares remarkably well to those values reported in this paper for the final survey. Inclusion on the omnibus generated a much larger sample than would normally have been possible, given the same cost, and appeared to have caused no bias.

3.4 Estimating Willingness-to-Pay

The logistic cumulative density function of individuals' WTP is written:

$$G(B) = [\, 1 + e^{-(\alpha+\Sigma\beta X)}]^{-1} \qquad (1)$$

where α and β are parameters to be estimated, and **X** is a matrix of bids and socio-demographic characteristics of the surveyed population, such as education, income, location and type of water supply.

The initial bid amount for each interview was selected randomly from the set of values S = [$5, $10, $15, $20, $30, $40]. These values were determined through by pretesting and pilot studies as described above (see Cooper, 1993 and Kanninen, 1995, for discussions on bid selection). If the individual responded "yes" to $ B, a second higher bid B^h, was selected from S. If the individual responded "no" to B, a second, lower bid from B^L, was selected from S. The process yielded a set of qualitative dependent variables:

- "yes-yes" if the respondent said "yes" to B and B^h,
- "yes-no" if the respondent supported B but rejected B^h,
- "no-no" if the respondent rejected B and B^L, and
- "no-yes" if the respondent rejected B but supported B^L.

Using this vector of dependent variables and the matrix of bid amounts and other socio-demographic variables (X), the parameters of equation (1) were estimated with the maximum likelihood estimator, using the algorithm developed by Cooper, (1993).

4. SUMMARY OF RESULTS

Table 1 summarizes the WTP point estimates and confidence intervals for six regional areas of Canada: British Columbia, Alberta, Manitoba and Saskatchewan, Ontario, Quebec, and New Brunswick, Nova Scotia and Prince Edward Island. This result was compared with a restricted model in which all coefficients for each region were equated. Using the maximum likelihood ratio test, we rejected the hypothesis that the restricted model was no different from estimating separate coefficients for each geographic region.

Willingness to pay estimates for the water infrastructure program described in the survey ranged from a low of $20.86 per household per month in Alberta to a high of $28.85 per household per month in Quebec. Confidence intervals for the 99% level were estimated using the method of Krinsky and Robb (Park et al, 1991) and are reported in Table 1 along with mean WTP estimates. Because WTP for Alberta is significantly lower than that for the other regions, Alberta was identified as a possible special case.

A number of explanatory variables were included to account for systematic differences among individual respondents, which would potentially affect their willingness to pay for the water infrastructure improvement program. These variables are listed in Table 2.

In all cases, age negatively affected the value of the program. This is unremarkable since the description of the program clearly stated that the consequences of a majority "no" vote would be a future decline in the quality of water services.

In most cases, household income did not significantly influence the probability that a respondent would vote for the program. The one exception is in British Columbia, were income was significant at the 90% level. The effects of household size on the coefficient for income were accounted for by including the number of people in the household as a separate variable.

A dummy variable for children was expected to indicate an increased willingness to pay for a program that would reduce costs to future generations. The coefficient on children was positive and significant at the 90% level in British Columbia. Children was also significant, at the 95% level, in the Atlantic Provinces, but with a negative sign. It is likely that in this region the presence of dependents has a negative affect on WTP due to effect on per capita household income. This region had the lowest household income for all regions.

Level of education had no effect on WTP in any region but Alberta, where higher levels of education had a negative impact on WTP. This was unexpected. There may be some correlation between educational level and prior awareness of potential water infrastructure problems, as represented by the dummy variable "aware". For all other regions, "aware" took on a positive value, indicative that prior awareness of the issue meant a greater WTP for the infrastructure program. The negative value for "aware" for Alberta is not statistically significant, but may reflect attitudes arising from previous experience with the issue that are unique to Albertans.

The dummy variable for agricultural activities indicates that the respondent uses water for either livestock or for irrigation purposes. Thus, the variable is on the one-hand a proxy for rural residents and on the other, reflects that water is used as a productive input to a farm operation. Agricultural activity is positive and significant at the 90% level for Ontario, and is negative and significant at the 95% level for British Columbia. Nowhere else is agricultural activity a significant predictor of WTP for the water infrastructure program.

Family homes was included as a dummy variable because it was thought that home owners or renters would be more likely to receive a water bill than apartment dwellers. Residence in a single family home had a negative influence on WTP at the 95% level in Ontario, and was significant nowhere else.

Receiving a bill for water services and for waste water treatment were included as dummy variables to distinguish those respondents who already pay for water services from those who do not. It was expected that the variable would pickup the same effects as that for single family residence. It could be argued that because these respondents already pay fees for the service, the amount they would be willing to pay to support the program would be lower than that of people who are not presently aware of paying specifically for water services. In most cases these variables are not terribly significant and have negative signs. A few cases warrant comment however. Quebec and Manitoba and Saskatchewan have much higher coefficients on the dummy for current water billing, and have positive values significant at the 95% level and just below the 90% level, respectively. Both variables are also positive in sign for Alberta, but with only water treatment charges being significant at the 90% level.

"Metered" is a dummy variable that accounted for households whose water charges were based on volume used. It was assumed that because volumetric billing induces consumers to conserve water, that this variable would have a positive sign. That is, it would indicate, all else being equal, those people who are already actively aware of conserving personal consumption of water. The variable is only significant above the 90% level for the Atlantic provinces and in Quebec, where it has a negative sign.

A separate set of questions were also asked of respondents to gain an understanding of why they chose to respond "yes" or "no" to either of the offered bid amounts. Of the two bid amounts that were offered to respondents, 15% (220) rejected both bid amounts offered, while 85% (1254) accepted either one or both of the bids (N=1474 because of missing values for a few of the observations). Of those individuals that responded "yes" to either bid (Table 3), the majority of responses centred around the fact that water is essential (31%). There was also a definite concern for future costs associated with a degraded water supply (20%) and a concern for future generations (18%). Of the "no" - "no" responses (Table 4), over 25% felt that they already paid enough for water or that they could not afford the increased price (18%). Of the 220 "no"- "no" responses, 29 indicated that they either objected to how the question was asked or that they did not believe that if they voted "yes" the money would actually be used by government for the purpose it was intended. 23 of the "no"- "no" respondents indicated that they did not believe that there was a real problem.

In all cases, the bid amount is a highly significant predictor of WTP for the water infrastructure program. The annual value of a project to improve infrastructure so as to maintain water quality at current levels can be estimated by aggregating over the monthly individual mean WTP estimates. In 1995, there were 11,214,000 Canadian households, (Statistics Canada 1995). This figure, when multiplied by mean monthly WTP over twelve months, yields an estimate of the annual value of the water infrastructure improvement program of approximately $3.5 billion.

Table 3: Reasons for "Yes" Response to Either Bid Offer		
	Count	%
Water is essential/I have no other choice	390	31.1
Avoid higher future costs	243	19.4
Should not leave to future/my responsibility	225	17.9
Preserve/improve water supply	170	13.6
Concern about health/ quality of life	137	11.0
Raise awareness	24	1.9
Other	28	2.3
Don't know	36	2.8
TOTAL	1254	100.0

Table 4: Reasons for "No" Response to Both Bid Offers		
	Count	%
Pay too much/ pay enough taxes	57	25.8
Can't afford it	38	17.4
Object to question/money will not go to program	29	13.0
Not a problem/ already conservation	23	10.4
Not applicable/not a municipal system	23	10.4
Let city pay	15	7.0
Own responsibility/I don't waste/family size	9	4.1
More important problems	7	3.4
Other	15	7.0
Don't know	4	1.7
TOTAL	220	100.0

CONCLUSIONS

1. The high number of respondents answering "yes" either to the first or second bid amount indicates a willingness among households to pay increased prices to maintain current levels of water services. The monthly WTP values reported here represents a substantial increase in rates over and above current water prices (about $21.50 per month). This WTP value is surprisingly close to the estimated marginal cost of the infrastructure program ($35.00) contained in the Tate and Lacelle (1995) study cited earlier. Most respondents (about 1250) appeared to believe either that there was no choice but to pay higher prices for water servicing, or that water was essential for their activities, or that there existed a need to preserve water for the future.

2. Slight difference in WTP emerged among regions, as shown in Table 1. We can speculate about the causes of these differences, although these speculations should be treated tentatively.

- In Atlantic Canada, the higher willingness to pay values may be a result of water billing being hidden. That is, many municipalities are charged flat rates for both their water and wastewater, so individuals do not realize how much they are paying currently for their water services. This would result in a tendency to overvalue a good not paid for directly.
- The higher apparent WTP in British Columbia may result from a generally high level of environmental awareness in the province, and generally lower water servicing prices than in the rest of Canada.

- The differences between Ontario and Quebec are interesting. Ontario has a higher proportion of meters, and many municipalities are billed monthly, whereas in Quebec billing is not as regular. Again like Atlantic Canada, individuals in Quebec may not fully realize how much they are already paying for their water. An alternative explanation deals with the fact that Quebecers consume more bottled water per capita than the rest of the country. This is an indication that Quebec residents are already paying more for good quality water.
- For the Prairie provinces, many municipalities (e.g., Winnipeg) have initiated substantial water awareness programs recently. The resulting increased water awareness among users would indicate a realization the current future problems that are associated with inadequate water systems. This would lead one to suspect a higher WTP value. The explanation appears not to apply to Alberta, where there are clearly other factors involved that give WTP values substantial below those of other regions. We cannot explain this anomaly currently.

3. Combining these factors, we can conclude that there exists substantial support for user-pay pricing. Public education may be a significant factor in fostering this support, since the WTP is higher in areas where there have been significant efforts made to establish water awareness programs. In fact, it would appear possible to foster further support for full cost pricing through the establishment of more water awareness programs.

4. From a public policy viewpoint, the water infrastructure financing crisis appears to be tractable using full cost pricing as a major starting point. In the future, funding programs by the senior levels of government could build upon this starting point by insisting on full cost pricing as primary source of required funds, with federal or provincial funding being used only to meet "hardship" or other unusual cases.

5. In addition to meeting much of the current financial shortfall, increased water prices on the magnitude suggested would provide a significant incentive for conservation of both Canada's water resource and scarce public capital.

6. The CVM methodology appears to be effective in analysing problems of public policy like the one addressed in this paper.

Table 1: Estimates of Average Willingness to Pay ($/month) per Household for Water Project by Regions, 1996

Variable	British Columbia	Alberta	Manitoba and Saskatchewan	Ontario	Quebec	Atlantic Provinces
Constant	2.3904*** (.8212)	2.7746*** (.9312)	2.7224*** (1.049)	3.1452*** (.4291)	2.0261*** (.5083)	2.3799** (1.002)
Bid	-.0772*** (.0064)	-.1097*** (.0106)	-.0939*** (.0096)	-.0917*** (.0044)	-.0793*** (.0046)	-.0910*** (.0093)
Age	-.0196** (.0095)	-.0253** (.0129)	-.0901* (.0134)	-.0200*** (.0059)	-.0140* (.0079)	-.0162 (.0146)
# in house	-.0938 (.1586)	.3124* (.2244)	-.0622 (.1889)	-.0293 (.0749)	.1271 (.101)	.2699* (.1757)
Children	.6368* (.4287)	-.3537 (.5328)	-.3080 (.5111)	.0123 (.2226)	.0061 (.2699)	-.9019* (.4652)
Education	-.0516 (.0990)	-.1832* (.1229)	-.1975* (.1274)	.0381 (.0609)	.0214 (.0725)	.0282 (.1384)
Income	.0025 (.0051)	.0043 (.0066)	.0021 (.0065)	.0048* (.003)	.0039 (.0040)	.0062 (.0085)
Single Family Home	.2850 (.3396)	-.4327 (.524)	.4379 (.5042)	.5370** (.2339)	-.2538 (.2313)	.1777 (.4999)
Wtr bill	-.0848 (.3484)	.3918 (.9008)	1.3001 (1.05)	-.3718 (.3348)	.7953** (.3998)	-1.0348* (.5453)
Metered	-.2403 (.4913)	-.3753 (.847)	.1883 (1.034)	.3153 (.3156)	-.7206* (.489)	.9765* (.728)
Agr. Activities	-.7856* (.4606)	-.0472 (.8431)	.1168 (.6313)	.5216* (.3895)	-.0300 (.3984)	-.6464 (.5978)
Pay for treatment	-3018 (.3801)	.7760* (.5132)	-.7319* (.4479)	-.0196 (.2234)	-.3920* (.245)	.2000 (.5869)
Awareness	.7240** (.3413)	-.0586 (.3851)	.7151* (.459)	.1067 (.1784)	.2475 (.1974)	.4052 (.377)
N =	199	134	127	523	399	121
Log likelihood	-237.36	-155.10	-147.29	-668.47	-503.27	-156.95
WTP	27.82	20.86	28.13	25.24	26.97	28.85
99% C.I.	23.44 to 32.24	17.20 to 25.13	23.92 to 32.84	22.86 to 27.61	24.17 to 29.79	24.28 to 34.25

*** Indicates significant at or above the .01 level, $\alpha = 2.576$.
** Indicates significant at the .05 level, $\alpha = 1.96$.
* Indicates significant at the .10 level, $\alpha = 1.3$.

Numbers in parentheses are standard errors.

Table 2: Explanatory Variables Used In The Logit Model

Variable	Definition
Bid	Dollar value offered to respondents
Age	Age in years of respondents
# in house	Number of people in household
Children	Dummy variable indicating that children live in household
Education	Categorial variable that is increasing with increasing number of years of formal education
Income	Household income in $1,000's
Single Family Home	A dummy variable that indicates respondent live in a single family home
Wtr bill	A dummy variable that indicates that the household receives a bill for water services
Metered	A dummy variable that indicates that water charges are on a volume basis
Agr. Activities	A dummy variable that indicates that the household uses water for irrigation or livestock
Pay for treatment	A dummy variable that indicates the household receives a bill for waste water treatment
Awareness	A dummy that indicates the respondent replied that she/he was previously aware of Canada's water infrastructure problems

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WOMEN'S CAMPUS SAFETY INITIATIVES

CALL FOR PROPOSALS, NOVEMBER 1966

The Province of Ontario, through the Ministry of Education & Training, has provided funding to the University of Guelph for innovative Campus Safety Initiatives to promote campus safety for women. The University of Guelph has received another $50,000 grant and the Ministry of Education has determined that these funds are to be distributed to support EXISTING PROJECTS, SERVICES OR DEPARTMENTS. Please note that this is not limited to previously funded WCSI projects.

Criteria for Funding

☐ Support is for existing programs, services or departments dealing with women's safety, sexual harassment and violence against women.

☐ Demonstrate that the safety concerns of a broad range of women, or those particularly vulnerable, are being addressed.

☐ Demonstrate the expected impact of your proposal.

Proposals should be no more than five pages not including budget information. Detailed budget information is required and please note that salary costs for permanent personnel are not eligible for funding. We especially encourage submission from or on behalf of the following at risk campus populations: disabled women, women shift workers, women in non-traditional studies, lesbians or bisexual women, women of colour, aboriginal women and women continuing education students.

Deadline for Applications

Guidelines for application are available from Human Rights Office, CSA, GSA and the UC Connection Desk. All applications for project funding must be submitted by **December 13, 1996**. The proposal must include a detailed budget. Send applications to **Safety Initiatives Proposal, Student Health Services, MacDonald Hall.**

THE WOMEN'S SAFETY INITIATIVES COMMITTEE ENCOURAGES PROPOSALS FROM ALL MEMBERS OF THE UNIVERSITY COMMUNITY INCLUDING INDIVIDUALS OR GROUPS OR FACULTY, STAFF AND STUDENTS. WE ENCOURAGE CREATIVE/ INNOVATIVE PROPOSALS FROM ALL INDIVIDUALS.

PLEASE COPY AND DISTRIBUTE TO ALL INTERESTED PARTIES