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WATERSHED PLANNING AND ADVISORY COUNCILS - THEIR
IMPACT ON MUNICIPAL WATERSHED MANAGEMENT AND
PLANNING

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Executive Summary

Watershed Planning and Advisory Councils (WPACs) have a lot to offer municipalities. Their Watershed Management Plans provide a blueprint for watershed management that aims to be environmentally, socially, and economically sustainable. Also, WPAC-based information and expertise help raise awareness of the broad watershed, as well as a host of more specific issues relating to, for example, water quality, water quantity, groundwater, wetland management, storm water management, flood and drought planning, and species at risk. For municipalities, WPACs can ultimately inform municipal decision-making concerning watershed management and planning.

This study assessed the impact of WPAC initiatives on municipal watershed management and planning. Four WPACs participated in the study – the Milk River Watershed Council Canada, the Oldman Watershed Council, the North Saskatchewan Watershed Alliance and the Battle River Watershed Alliance. A survey of municipalities within the watersheds was conducted.

Based on responses to the survey, the study finds municipalities have a relatively high level of awareness of, and support for, WPACs and their work. Results also show the greatest benefit of working with WPACs is shared knowledge and expertise. However, other results are mixed, depending on the WPAC. For example, Watershed Management Plans' impacting municipal planning vary from 71% of respondents for one WPAC, down to 32% for another. In terms of WPACs informing municipal decision-making and statutory document development, the results vary from 69% of survey respondents affirming an impact to 41%, depending on the WPAC.

For some WPACs, effective communication with municipalities is lacking. Thus, while WPACs have a lot to offer, not all municipalities are maximizing potential benefits. WPACs can extend their reach to municipalities through familiar, affordable and efficient communication methods including virtual presentations and increased e-mail contact. And when common messaging is appropriate, WPACs should collaborate amongst themselves to ensure effective and comprehensive communications with municipalities.

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Background

Contemporary approaches to water management avoid top-down, government-based methods (de Loe et al., 2009). Instead, efforts towards water management involve an integrated, participatory approach, ideally involving decision-making processes that accommodate diverse views amongst state and non-state actors, shared learning, and opportunities for adoptability and positive transformation (de Loe et. al., 2009). This new integrated approach advocates for the watershed as the appropriate scale for organizing water management (Blomquist & Schlager, 2005) where the overarching purpose is to “resolve water management issues such as the availability of water for future allocations and river flows needed for protection of the aquatic environment” (AENV, 2002, p. i).

This framework formed the basis on which Alberta’s Water for Life Strategy of 2003 was developed. The Strategy zeros-in at the watershed level, devolving management through a network of partnerships consisting of three facets (AWC, 2008):

- a. Alberta Water Council (AWC) – responsible for the development of strategic policy at the provincial level.
- b. Watershed Planning Advisory Councils (WPACs) – responsible for planning at the watershed or basin level. Each WPAC is a stand-alone, incorporated society with a mandate for effective water management in its watershed. Their principle mandates are to develop a state of the watershed (SOW) report and a watershed management plan.
- c. Watershed Stewardship Groups (WSG) – perform a combination of grassroots work, public education, and engagement activities.

This study focuses on WPACs. Currently, 11 watersheds have organizations that are formally recognized as Alberta WPACs. The location of the WPACs is depicted in the map below.

Map 1: Watershed Planning and Advisory Councils



Source: Alberta Environment and Parks

WPACs are commissioned under the province’s Water for Life Strategy to protect watersheds. As such, they play a central role in the province’s water Strategy. Their mission is to foster multi-stakeholder collaboration and community engagement within four main program areas:

- ▶ Education and outreach
- ▶ Environmental stewardship
- ▶ Watershed evaluation and reporting
- ▶ Watershed management planning

There are two key WPAC deliverables. The first includes collecting science-based data on the state of the watershed in the development of the State of the Watershed report (SOW). The SOW describes the history of the watershed, its natural and built features, the condition of the resources, and the impact of human activity on the watershed. The SOW informs the development of the second key deliverable – the Watershed Management Plan (WMP). The Plan is a blueprint to water management that is environmentally, socially and economically sustainable. The process in developing the Plan is working collaboratively with stakeholders, including municipalities:

Watershed management planning is a comprehensive, multi-resource management planning process involving all stakeholders within the watershed. The stakeholders identify the watershed’s resources, issues, and concerns and develop and implement a watershed management plan with solutions that are environmentally, socially, and economically sustainable (ESRD, p.3).

Because municipal governments have a significant bearing on the management of land and water, they play a crucial role in the WPACs’ ability to fulfill their mandate. WPACs undertake multiple roles to raise awareness of the larger context of the watershed: the interrelationship between the natural, economic and social environment; water-related issues including water quality, water quantity, groundwater, wetland management and storm



Source: publicdomainpictures.net

water; species at risk; and the impact of municipal activities on the watershed. WPACs also work with stakeholders and their interests to help improve contacts and collaborations with these stakeholders. As relates to municipalities, WPACs numerous functions are intended to inform municipal land and water management and planning.

Ultimately WPACs can incentivise municipalities towards multiple objectives including to protect water quality for recreation, drinking and others uses; maintain good quality agricultural land; improve the health of shorelines, streambanks and wetlands; work with landowners to implement restoration projects; ensure access to adequate water supplies; prevent the spread of invasive species; manage stormwater and wastewater; build resilience

to extreme weather events such as floods and droughts; and support watershed education programs. As noted above, the development of the WMP includes consultation with municipalities. The WMP is intended to guide municipalities in creating municipal development plans, land-use bylaws, area structure plans and best management plans.

An effective working relationship between WPACs and municipalities is vital. However, no one has evaluated the impact of WPAC initiatives on municipal land and water management and planning. To fill this void, this study surveyed municipalities to determine the impact of WPAC initiatives. The objectives of the study are to:

- ▶ enhance our knowledge and understanding of the effectiveness of WPAC initiatives
- ▶ identify challenges or barriers to effective WPAC initiatives to maximize the benefits of the initiatives
- ▶ develop recommendations to improve effectiveness where needed, including recommendations for joint WPAC collaboration where possible.

The Study

This study chose four WPACs as the basis of this exploration. The four WPACs were chosen to represent a cross-section of geographically small and large, as well as southern and more northern-based organizations. The WPACs also represent those with unique challenges due to differences in natural and built features, the condition of water and land resources, and the impact of human and livestock activity on the watershed. The four WPACs surveyed are: Milk River Watershed Council Canada (MRWCC), Oldman Watershed Council (OWC), North Saskatchewan Watershed Alliance (NSWA) and Battle River Watershed Alliance (BRWA). These WPACs were recruited for the study in October 2020.

Data collection occurred through a survey of all municipalities within the four WPACs. The four WPACs assisted in the development of the survey questionnaire. Ethics approval to carry out the survey was obtained by the University of Lethbridge on November 21, 2020. The survey questionnaire was then designed and uploaded on a Qualtrics online survey platform (Qualtrics, 2021).

An invitation to participate in the survey was sent by e-mail to all municipalities within the watershed. This included cities, towns, villages, summer villages, municipal districts, rural municipalities, counties, improvement districts and special districts. Within each municipality, the invitation went to three individuals: the elected municipal representative on the WPAC (for municipalities without a representative, the invitation was sent to the mayor or reeve); the senior administrator, chief administrative office or planner; and where available, an operations person such as an agriculture Fieldman, extension specialist, water specialist, or parks department head. E-mail addresses were derived from two e-mail lists sourced from Alberta Municipal Affairs and the Association of Alberta Agricultural Fieldmen. An invitation to participate was sent from the executive director of each WPAC on February 1, 2021 and included a live link to the survey itself. The survey was open from February 1, 2021 to February 28, 2021. A reminder notice was sent by e-mail on February 16, 2021.

An anomaly in the data gathering process occurred when the BRWA decided to send the invitation to all their municipal contacts, therefore approximately tripling the number of invitations sent by that WPAC. The three individuals originally intended to receive the invitation were those who would either have experience working with their WPAC and/or be aware of the WPAC. The invitation by the BRWA to all municipal contacts may, therefore, compromise comparisons across WPACs. However, one might also assume individuals most interested in participating in the BRWA survey would be those who have experience working with the WPAC and/or be aware of them.

Findings

Survey Response Rate

The overall response rate to the survey was 30.9% of the total number of invitations sent across the four WPACs (531). On a council-by-council basis this included: MRWCC - 77.8% (14 of 18 invitations); OWC – 53.1% (34 of 64 invitations); NSWA – 40.6% (63 of 155 invitations); BRWA – 18.0 (53 of 294 invitations). Table 1 below also provides a break-down in responses by type of municipality across the four WPACs.

Table 1: Response Rate by Type of Municipality (% of total)

Type	MRWCC	OWC	NSWA	BRWA
City	0	9.5	19.5	9.4
Town	12.5	38.1	17.1	15.6
Village or summer village	12.5	4.8	24.4	3.1
Municipal district, rural municipality, county, improvement district or special district	75.0	47.6	39.0	71.9

Broad Indicators

This study first sought to explore several broad, key indicators as related to awareness of the work of the WPAC, the value of the work, and effects on municipal decision making. The indicators and results are enumerated in Table 2 below.

Table 2: Broad Indicators (% of respondents who ‘strongly agree’ or ‘somewhat agree’)

Indicator	MRWCC	OWC	NSWA	BRWA
I am aware of the WPAC	100	97.0	93.7	98.1
I am aware of the work of the WPAC	100	84.6	80.0	79.6
I value the work of the WPAC	91.6	84.6	77.6	80.0
It is important to me that my municipality work with the WPAC	83.3	76.9	76.0	73.91
In working with the WPAC, my municipality makes more informed decisions on potential impacts on watershed health	69.2	40.7	62	65.9
In working with the WPAC, my municipality makes more informed decisions on developing statutory documents (example municipal development plans)	66.7	40.7	56.3	65.9

The data indicates that almost all survey respondents are aware of their WPAC. And of those who are aware, a relatively high percentage are aware of their work, between 80% to 100% across the four WPACs. The level of awareness is high for the smallest geographically based WPAC, the MRWCC, at 100%. High, but somewhat lower figures exist for those with the larger geographic areas, for the OWC this was 85% and the BRWA and NSWA of 80%.

When asked to rate the statement 'I value the work of my WPAC', a relatively high percentage of respondents 'strongly agree' or 'somewhat agree', between 78% (NSWA) and 92% (MRWCC). A somewhat lower percent strongly agreed or somewhat agreed with the statement that 'it is important to me that my municipality work with my WPAC'. The percentages range from 74% (BRWA) and 83% (MRWCC).

In assessing the impact of WPAC initiatives on municipal planning, the survey asked whether 'in working with my WPAC, my municipality makes more informed decisions on potential impacts on watershed health'. The percentage of respondents who 'strongly agree' or 'somewhat agree' with this statement ranged from a high of 69% (MRWCC) to a low of 41% (OWC). More specifically the percentages are, from high to low: MRWCC – 69.2%; BRWA – 65.9%; NSW – 62.0%; OWC – 40.7%.

In further assessing the impact of WPAC initiatives on municipal planning, the survey then asked whether 'in working with my WPAC, my municipality makes more informed decision on developing statutory documents', for example, municipal development plans. A similar percentage of respondents either 'strongly agreed' or 'somewhat agreed' with this statement as with the previous statement, a high of 67% (MRWCC) to a low of approximately 41% (OWC). More specifically the percentages are, from high to low: MRWCC – 66.7%; BRWA – 65.9%; NSW – 56.3%; OWC – 40.7%.

The study then explored in more detail the impact of specific WPAC-related planning exercises on municipal planning. Eight planning exercises were listed. Table 3 below ranks the eight planning exercises by WPAC, from high to low, according to the percentage of respondents who answered affirmatively. Percentages are in brackets.

Table 3: Planning Exercises Impacting Municipal Planning (% of respondents who agree)

MRWCC	OWC	NSWA	BRWA
WMP (58.3)	WMP (32.0)	WMP (55.4)	WMP (71.8)
Water quality (58.3)	Water quality (32.0)	Drought and flood (48.9)	Drought and flood (64.1)
Drought and flood (50.0)	Drought and flood (32.0)	Technical studies (31.9)	Source water protection (46.2)
Water security (50.0)	Source water protection (28.0)	Water quality (29.8)	Water quality (38.5)
Partnership initiatives (41.7)	Water security (20.0)	Partnership initiatives (29.8)	Technical studies (30.8)
Source water protection (33.3)	Wildlife, biodiversity and species at risk (20.0)	Source water protection (23.4)	Water security (23.0)
Wildlife, biodiversity and species at risk (25.0)	Technical studies (20.0)	Wildlife, biodiversity or species and risk (21.3)	Partnership initiatives (20.5)
Technical studies (16.7)	Partnership initiatives (20.0)	Water security (12.8)	Wildlife, biodiversity and species at risk (17.9)

The first observation from the data is that all exercises have some impact on municipal planning. However, the impact varies from exercise to exercise, from a high of 72% to a low of 13%. Across all WPACs, the WMP is the most prominent planning exercise impacting municipal planning, based on the frequency of this choice. The percentage of respondents affirming this impact by watershed council is, from high to low: BRWA – 71.8%; MRWCC – 58.3%; NSW – 55.4%; OWC – 32.0%. Second, drought and flood planning are also highly ranked, reflected in this exercise being either the second or third most frequently identified exercise in terms of impact on their municipal planning across the four WPACs. The percentage of respondents by watershed council is, from high to low: BRWA – 64.1%; MRWCC – 50.0%; NSW – 48.9%; OWC – 32.0%. Water quality initiatives also rank relatively high amongst the planning exercises, ranking second in frequency for the MRWCC and OWC and fourth in frequency for the NSW and BRWA. The percentage by watershed council is, from high to low: MRWCC – 58.3%; BRWA – 38.5%; OWC – 32.0%; NSW – 29.8%.

As noted earlier, WPACs are unique from each other in terms of the challenges they face due to natural and built features, the condition of water and land resources, and the impact of human and livestock activity on the watershed. Hence the frequency in identifying certain exercises as far as impacting municipal planning may reflect the degree of importance of the issue on the watershed. For example, as relates to impacting municipal



Source: publicdomainpictures.net

planning, water security ranks third and fourth for the MRWCC (50.0%) and OWC (20.0%) respectively, but last for NSWA (12.8%). Source water protection ranked third for the BRWA (46.2%) but sixth for the NSWA (23.4%) and MRWCC (33.3%).

In comparing results in Table 2 across WPACs, the frequency of identifying these planning exercises as impacting municipal planning varies considerably. For example, the percentage of respondents indicating the WMP impact municipal planning ranges from approximately 72% for the BRWA to 58% for MRWCC to 55% for the NSWA and 32% for the OWC. In *averaging* the frequency that the exercises were identified as impactful across the eight exercises by WPAC, the averages by WPAC from high to low are: MRWCC - 44.7%; BRWA - 39.1%; NSWA – 31.6%; OWC – 26.5%. This means on average, about 45% of MRWCC respondents identified each of the exercises as impactful, compared to an average of approximately 27% of respondents for the OWC.

This difference in impact across WPACs may relate, in part, to the level of awareness of respondents of WPAC planning exercises. A survey question gauged the usefulness of the exercises as well as the awareness of them. The results are contained in Table 4.

Table 4: Usefulness, Awareness (% of respondents)

Factor	MRWCC	OWC	NSWA	BRWA
No exercises are useful	0	4.0	2.1	7.7
Unaware of WPAC planning exercises	0	56.0	29.8	5.1

The results indicate very few respondents do not find the exercises useful, however for some WPACs the lack of awareness of planning exercise is quite high. The percentage of respondents indicating they were unaware of planning exercises were, from low to high: MRWCC – 0%; BRWA – 5.1%; NSWA – 29.8%; OWC – 56.0%. The lack of awareness is relatively high for the OWC - 56% - which corresponds to an earlier finding that only 26.5% of respondents on average indicate WPAC planning exercises impact municipal planning.

Raising Awareness

One of the primary roles of WPACs is education and outreach. Therefore, a subsequent set of questions gauged whether by working with the WPAC, the municipality has increased its awareness of a host of water and land-related subjects. For purposes of this survey, nine subjects were identified. These subjects include, for example, the relationship between land use planning and watershed health, water quality, water quantity, invasive species, riparian and wetland health, watershed stakeholders, and the promotion of native species. The percentage of respondents who indicated WPACs raised awareness, by subject, is contained in Table 5 below.

Table 5: Raised Awareness by Subject (% of respondents who agree)

Subject	MRWCC	OWC	NSWA	BRWA
What a watershed is and the relationship between land use planning and watershed health	81.8	72.7	83.3	91.7
Water quality/water quantity/riparian and wetland health and other watershed issues in our municipality	81.8	63.6	83.3	88.6
Watershed stakeholders/partners in our municipality and have improved contacts and collaboration with them	72.7	45.0	75.0	77.1
The conservation of native prairie (grassland) habitat as a component of watershed health	77.8	65.0	63.8	77.8
Invasive plant species and their control as a component of watershed health	81.8	50.0	65.2	71.4
The conservation of ecosystems and promotion of native species – plants, pollinators, birds and other wildlife	80.0	50.0	59.6	77.8
Incorporation of ecological principles in land use planning and infrastructure designs	54.6	40.0	68.8	71.4
The importance of sharing ecological and sustainable principles and practices	81.8	52.4	70.2	79.4
Managing natural public spaces to maintain a balance between use and ecological integrity	54.6	50.0	74.5	74.3

The data indicate that, for all subjects, working with their WPAC has heightened awareness. Across WPACs the subject with the highest percentage of respondents is *'what a watershed is and the relationship between land use planning and watershed health'*. And except for the OWC, the subject with the second-highest percentage of respondents, over 80%, is *'water quality/water quantity/riparian and wetland health and other watershed issues in our municipality'*. For the OWC the subject with the second-highest percentage of responses is *'the conservation of native prairie (grassland) habitat as a component of watershed health'*. For the MRWCC, across five subject areas over 80% of respondents indicated a raised awareness. For the remainder, the lowest percentage, 55%, were for the two subject areas of *'incorporation of ecological principles in land use planning and infrastructure designs'* and

'managing natural public spaces to maintain a balance between use and ecological integrity'. For the OWC, except for one subject, percentage ratings across the nine subjects were lower relative to the other three WPACs. The percentages ranged from about 40% to 70% of respondents indicating a raised awareness. For five of the nine subjects, 50% of respondents or less indicated a raised awareness. Results for the NSWA show that except for the top two subjects, between approximately 60% to 70% of respondents indicated a raised awareness. Finally, for the BRWA, for the seven subjects beyond the top two, the percentage of respondents was consistently in the 70% range.

On a percentage basis, across the nine subjects, the average percentage of respondents who indicated a raised awareness by WPAC was, from high to low, BRWA – 78.9%; MRWCC – 74.1%; NSWA – 71.5%; OWC – 54.3%.

Communications

The effectiveness of WPACs work is very contingent on effective communication strategies. The study, therefore, explored the communication methods through which municipalities receive information from WPACs and how communication methods could be enhanced.

Table 6 below indicates the communication methods by which municipalities receive information from WPACs.

Table 6: Communication Methods by which Municipalities Receive Information (% of respondents)

Method	MRWCC	OWC	NSWA	BRWA
Direct emails	75.0	60.0	57.1	75.6
Newsletters	75.0	56.0	46.9	62.2
Membership emails	33.3	24.0	26.5	22.2
WPAC forums or extension events	41.7	4.0	28.6	35.6
Direct calls from WPAC staff	25.0	8.0	10.2	15.6
Other	25.0	16.0	16.3	6.7
None	0.0	8.0	10.2	4.4

The results indicate that by far the most communion methods by which municipalities received information from WPACs are direct e-mails and newsletters. The percentage of respondents indicating the use of direct e-mails varied from approximately 75% (MRWCC) to 57% (NSWA). For newsletters, the percentage ranged from approximately 75% (MRWCC) to 47% (NSWA). Approximately one-quarter to one-third of respondents indicated membership e-mails were also a form of communications. Results varied considerably regarding the use of WPAC forums or extension events as a form of communication. From high to low, the percentages are: MRWCC – 41.7%; BRWA – 35.6%; NSWA – 28.6%; OWC – 4.0%.

Recall that earlier it was noted that some respondents are unaware of their WPACs work. This included about 20% of respondents for the BRWA and NSWA and 15% of respondents for the OWC. Also, recall not all respondents are aware of WPAC planning exercises. This included 56.0% for the OWC, 29.8% for the NSWA and 5.1% for the BRWA. The survey thus explored how WPAC communications can be improved. Table 7 shows the results from the open-ended question, where respondents were asked to specify the communications methods through which engagement could be enhanced.

Table 7: Improving WPAC Communication (total number of respondents)

Communication Method	MRWCC	OWC	NSWA	BRWA
Direct engagement through presentations to council, decision-makers, and administration, including virtually via Zoom, Teams etc.	0	5	2	4
E-mail more people in the municipal organization	2	1	4	4
Direct phone conversations	0	2	1	0
Utilize social media	1	1	1	2
Ensure information gets to the proper contacts	1	1	1	0
Signage indicating projects that are underway or completed by the WPAC	0	0	0	1

A small number of respondents provided feedback on this question, but the most frequently cited communication method that could improve communications was direct engagement through presentations to the municipal council, decision-makers, and administration,

including virtual presentations. This was noted by five respondents for the OWC, four for BRWA and two for the OWC. The second most cited method was e-mailing more people in the municipal organization, identified by four respondents for both the NSWA and BRWA, two for the MRWCC and one for the OWC. Less frequently identified, but noted nonetheless, were direct phone calls, use of social media, ensuring information gets to the proper contact, and use of signage.

Benefits and Challenges

The survey explored the greatest benefits and challenges of working with a WPAC. Tables 8 and 9 below summarize the results from the open-ended question, where respondents were asked to list the greatest benefit(s) and challenge(s) of working with the WPAC. Again, although there were a relatively small number of responses, the results provide an indication of the benefits and challenges of working with WPACs

Table 8: Greatest Benefit(s) of Working with a WPAC (total number of respondents)

Theme	MRWCC	OWC	NSWA	BRWA R.
Increase in knowledge/awareness/education/expertise/information	2	2	18	13
Collaboration with stakeholders/networking/partnerships	1	1	5	3
Preservation of environment/sustainability/stewardship	1	3	4	1
Water quality/ drought planning/water security	0	3	0	1
Acting as one voice with the Government of Alberta	0	0	0	1
Access to grants by landowners for riparian work	0	1	0	0

Across WPACs, there were three commonly enumerated benefits – increased knowledge and awareness, collaboration with stakeholders, and preservation of the environment. These benefits are consistent with the WPACs mandate. Water quality/drought planning/water security were noted as benefits by OWC and BRWA respondents. Acting as one voice with the Government of Alberta was a benefit noted by a BRWA respondent and access to grants by landowners was noted by one OWC respondent.

Table 9: Greatest Challenge(s) of Working with a WPAC (total number of respondents)

Theme	MRWCC	OWC	NSWA	BRWA
Making connections/ engaging/communicating	1	7	11	4
Lack of municipal resources (time, funding)	3	0	4	3
Lack of understanding of municipal processes	1	1	0	0
Vast physical distance (local context can get lost, physical distance from WPAC)	0	0	0	5
WPACs and government (WPACs don't take a firm stand, need to lobby harder, need to work with policymakers)	0	2	1	0
Own council's lack of knowledge, lack of use of knowledge	0	0	2	0
Trust of WPACs – by the public and municipalities	0	0	1	1
Other	0	1	2	2

Across WPACs, one of the most frequently noted challenge in working with WPACs is making connections with them. For the BRWA specifically, a number of respondents indicate vast physical distances can be a challenge, resulting in the local context getting lost and being physically distanced from the WPAC itself. Some respondents indicated municipalities themselves contribute to the challenge. For example, respondents for three WPACs (MRWCC, NSWA, BRWA) indicated lack of municipal resources (time and funding) presented a challenge. And for the NSWA, two respondents indicated a challenge included lack of their own council's knowledge and use of knowledge. WPACs' lack of understanding of municipal processes was once noted for the MRWCC and OWC and lack of trust was once noted for the NSWA and BRWA. Finally, noted by OWC and NSWA respondents was the relationship between WPACs and government, specifically WPACs not taking a firm stand, needing to lobby harder, and needing to work with policymakers.

Conclusions and Recommendations

In pulling together various themes from the study's findings, the results show there are relatively high levels of awareness of WPACs and their work by municipalities. But some municipalities indicate a lack of awareness of WPAC *planning exercises*, as high as 56% of respondents for one WPAC. There is a relatively high level of support for WPACs given

approximately three-quarters of respondents feel it is important that their municipality work with their WPAC. When asked what the greatest benefit of working with a WPAC is, the most common response was an increase in knowledge, awareness, education, expertise, and information.

In terms of impact on municipalities in making more informed decisions and in developing



statutory documents, the results are mixed. WPACs are making an impact, but the degree of impact varies from a high of 69% of respondents indicating this is the case for one WPAC, to 41% of respondents for another.

Source: publicdomainpictures.net

In terms of specific planning exercises (eight were listed), while all exercises have some impact on municipal planning, the impact also varies significantly, from a high of 72% of respondents indicating there is an impact, to a low of 13%. However, this variation may reflect the degree of importance of the different issues on a given watershed.

Given the WMP's are developed in consultation with municipalities, it is reasonable to expect that the Plans impact municipal planning. For some WPACs this is as high as 71% of respondents indicating this is the case, but for others it is as low as 32% of respondents. For the WPAC with the 32% rating, 56% of respondents indicated they were not aware of WPAC planning exercises.

Across nine subject areas, WPACs increased awareness for municipalities. This was especially true for broad subject areas such as the relationship between land-use planning and watershed health as well as a host of watershed issues in municipalities (water quality, water quantity, riparian and wetland health for example). The percentage of respondents affirming this increased awareness across WPACs was frequently in the 80% range. However, in some cases the percentage of respondents was as low as 40% to 50%.

These mixed results point to the degree of effectiveness of WPAC communications with municipalities. For some WPACs poor communications are limiting the full benefit of information sharing and expertise on municipal land and water management and planning.

Hence, while WPACs have a lot to offer municipalities, not all municipalities are maximizing the benefits. When asked to identify the greatest challenge of working with a WPAC, the most common answer was making connections, engaging, and communicating.

Currently, the most common methods by which municipalities receive information from WPACs are through direct e-mails and newsletters. Certain WPACs need to expand the reach of their information sharing and expertise. Reaching out to municipalities can be improved through common, affordable, and efficient means. When asked how communications can be improved, the most frequent response was increasing direct engagement through presentations to council, decision-makers and administration including through virtual means such as Zoom and Teams (which can be carried out across multiple municipalities at one time). Respondents also recommended extending e-mail contact to more people in municipal offices.

In some cases, WPACs can collaborate together in communicating with municipalities. This may be effective when, for example, certain government initiatives, policies and/or regulations affect all watersheds. Further, there may be common WPAC initiatives that are beneficial across multiple municipalities. In these instances, WPACs can develop common messaging and ensure communications reach all municipalities in those watersheds.

Ultimately, improving the effectiveness of WPACs will in turn enhance land stewardship and water management for sustainable communities, which affects property values and impacts all citizenry, including people in the real estate industry who work and live in these same communities.

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