

A duck meanders along Nose Creek, the focus of Vesta Properties' environmental reserve plans  
PHOTO COURTESY VESTA PROPERTIES



# Growing with the Flow

Vesta Properties allows the natural corridor of Nose Creek to define Airdrie's newest community

BY ALEX FRAZER-HARRISON



Rhonda Deaville-Erb, parks planner; Shelly McIntosh, city community planner and Chris Elkey, development manager for Vesta Properties discuss the plans to reduce the impact of Williamstown on Nose Creek

PHOTO BY SERGEI BELSKI

**T**o some, Nose Creek might seem like a minor waterway, with nowhere near the impact of the Bow River as it winds its way through Airdrie.

But in fact it provides habitat for fish and birds, acts in some places as a wildlife corridor and provides welcome greenspace in a fast-growing urban area.

That's why when Vesta Properties Ltd. began planning its newest neighbourhood in north Airdrie, Williamstown, accommodating Nose Creek became a top priority.

Williamstown is the first community of its type to truly embrace Nose Creek as a major feature, establishing approximately 45 acres – about 28 per cent of the 160-acre development – as environmental reserve surrounding the creek and its floodway.

"We think we're a trailblazer," says Chris Elkey, development manager for Vesta. "This is really the first of its kind in Airdrie. The old practice would have been to straighten the creek out and put a buffer of six metres from the bank and build the rest."

Instead, Vesta is working to protect the creek, which crosses under 8th Street from another development to the east and

then winds through Williamstown towards the north.

When an area is designated environmental reserve, or ER, "it essentially remains in its natural state," explains Elkey. "We do plan to put some pathways in there, and a couple of [pedestrian] bridge crossings, but we're minimizing the amount of development we do in there."

Not developing homes too close to the creek also has a practical purpose; in Williamstown, the creek is surrounded by a floodway. "When we had heavy rains [last] spring, we confirmed those boundaries ... flood waters stayed within the ER," says Elkey, noting planned residential development is elevated four to five metres above the floodway.

Elkey says the process of preparing Williamstown for development involved doing a biophysical impact assessment of the area. "We inventoried plant species, animal species and natural ecosystems," he says. "All along, we worked with the City to make sure what we were doing in there ... was appropriate."

The City of Airdrie recognizes the importance of Nose Creek and has signed on to the Nose Creek Watershed Partnership, which promotes the stewardship of the creek.

"Our intent with new development is to preserve the creek's natural flow and alignment," says Rhonda Deaville-Erb of Parks Planning. "There are some challenging areas for this within the inner city. In some cases, it's about restoring it using riparian planting ... the introduction of more natural vegetation that is going to allow for preservation of the ecosystem and building a buffer zone."

One of the main Nose Creek-related projects undertaken by the City is Nose Creek Park off Main Street.

"There was a watermain break, so some bioengineering measures were taken to stabilize the bank, and there is some native planting occurring," says Deaville-Erb. "In a lot of the central Nose Creek Park area, we try to maintain the natural planning, while at the same time we're challenged that in the floodway there's not a lot of trees, so we've introduced trees in those areas to provide more of a buffer and to provide more shade and more interest."

The City was a founding partner in the Nose Creek Watershed Partnership when it formed in 1998.

"There were issues with downstream water quality, and because of that, the Partnership was formed to address the cumulative effects of commercial, industrial and residential development and agriculture, and decrease pressure on the watershed," explains Partnership co-ordinator Erin McMahan. "If you drive on Highway 2 you can see [the creek] has become highly channelized; there's not a lot of native vegetation left. It's in a terrible place for a creek ... it has no room to meander."

Other issues faced by the creek include invasive (non-native) plant species and grasses poking their proverbial noses in, and problems with erosion and silt settlement, McMahan says.

Urban storm water runoff is another concern. "Most storm water is not treated; in newer developments there's some treatment, but in older neighbourhoods it just goes straight into the creek," says McMahan, adding the water runs off rooftops and roadways, collecting chemicals and other contaminants along the way. "It contributes to downgraded water quality."

“... approximately 45 acres – about 28 per cent – of the 160-acre development [will be] environmental reserve”

Increased setbacks allow for better treatment of this water, says Deaville-Erb.

The City of Airdrie has adopted the Partnership's 2007 Nose Creek Watershed Water Management Plan as one of its planning tools. "That's enabled the planning and engineering departments to work with developers in implementing the recommendations in the Water Management Plan," says McMahon.

These recommendations include protection of natural features such as banks and escarpments from erosion and other factors; protection of riparian plantlife; water quality protection; integrated storm water management; and other water-conservation and mitigation/compensation/restoration objectives.

Both McMahon and Deaville-Erb say Williamstown is an example of how developers, the City and groups like the Partnership can work together to come up with a development plan that addresses both the practical needs of business, while protecting natural areas within Airdrie.

Ongoing commercial and industrial development south of Yankee Valley Road presents further challenges to maintaining Nose Creek. Already, efforts have been made to minimize the impact on the creek.

"We're constantly working with developers to ensure the alignment remains the same

and, if not exactly the same, any retrofit done is done to enhance it rather than degrade it," says Deaville-Erb. "As it goes further [south], it's a challenge to balance between the commercial areas, any kind of development around the creek. But the same guidelines apply with regards to setback and trying to preserve alignment of the creek."

But, she says, the lay of the land is different in Sierra Springs and areas south than in Williamstown; for example, the floodway is much smaller.

Meanwhile, construction of the first homes in Williamstown were, at press time, scheduled to begin earlier this year, and Elkey says the theme of sustainability carries on into the layout of the community, with increased density requiring less of a footprint.

"Typically in a city you'll have a ratio of 70 per cent single family, 30 per cent multi-family," he says. "We've gone to 40 per cent single family and 60 per cent multi-family, and within those multi-family sites we're providing a variety of different [housing] types ... and more affordable housing."

Defining the ER will be part of Phase 1, Elkey says, adding one of Vesta's goals is to work with the City on community education initiatives related to the natural area.

"We're piloting a program [to install] interpretative signage," he says. "We'll have seven of them at the entrances to the park, talking about the environmental [and] historical themes, some of the wildlife, and the importance of the creek and the floodway area. We're trying to educate people why this is a different kind of park."

Elkey says the lessons learned from Williamstown will be valuable in planning future developments. **LIFE**

**FOR MORE INFORMATION** on the Nose Creek Watershed Partnership, and to view its Water Management Plan, visit [www.nosecreekpartnership.com](http://www.nosecreekpartnership.com)

Nose Creek is a waterway that runs through two major urban areas, and it needs help to maintain as much of its natural form as possible.

That's why Trout Unlimited Canada established the Nose Creek Rehabilitation Project, which since 2006 has been involved in efforts to mitigate and repair some of the effects we have had on the creek.

"It's an on-the-ground stewardship program, a partnership between Trout Unlimited Canada and the Nose Creek Watershed Partnership," says program co-ordinator Erin McMahon. "It's volunteer-based and provides stewardship activities including clean-up events, bioengineering, weed control, planting native vegetation and willow staking."

Among local projects spearheaded by the program include an upcoming effort to install a wattle fence along the creek. The program has also worked with Petro-Canada employees who in 2007 and 2008 came out to Airdrie as part of their corporate Day of Caring to do rehabilitation work on the creek.

The project will be hosting its annual Nose Creek Clean-Up Event on June 6, which will see volunteers come out to pick up garbage, pull weeds and do plantings along the creek in Airdrie.

"We'll have a biologist from Trout Unlimited come out and do an electro-fishing demo, which doesn't hurt the fish – we net them and then identify them," says McMahon. "That's for the kids, but everyone enjoys it."

Funding for the project has come from Petro-Canada, Unilever Evergreen and the Calgary Foundation.

McMahon says the door is always open for schools, community groups and others who want to organize Nose Creek-related rehabilitation events.

"We're always looking for volunteer groups, businesses," she says. "We want to promote our programs in the community. We can work with any age of kids, retired people, businesses; we can tailor an activity and get the message out there."

**FOR MORE INFORMATION** on the Nose Creek Rehabilitation Project – and to volunteer – call 403-209-5180 or visit the Trout Unlimited Canada website at [www.tucanada.org](http://www.tucanada.org)

Aerial view of Nose Creek as it winds through the Williamstown area  
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