Travis County Commissioners Court Agenda Request

Meeting Date: 1/17/12
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Division Director/Manager: Steven Manilla

Department Head: Steven M. Manilla, P.E., County Executive-TNR
Sponsoring Court Member: County Judge Sam Biscoe

AGENDA LANGUAGE: Approve the setting of a public hearing on January 24, 2012 to receive public comments on proposed amendments to Chapter 82, Travis County Code, establishing water availability rules for subdivisions.

BACKGROUND/SUMMARY OF REQUEST:

In October 2010, the Commissioners Court suspended approval of subdivisions using Trinity Aquifer groundwater and created a Stakeholder Committee to work on water availability issues. Staff met with the Committee seven times, six of which were before proposing an initial rule proposal at the September 20, 2011, Commissioners Court meeting.

During October 2011, the Commissioners Court held a work session with the Stakeholder Committee and extended the suspension until January 31, 2012. Staff presented a list of possible revisions to the initial rule proposal at the November 15, 2011, Commissioners Court meeting.

Staff then presented a narrowed-down list of possible revisions (see attached "Proposal For Discussion") to the full Stakeholder Committee on November 30, 2011, and later held several meetings with individual stakeholders.

STAFF RECOMMENDATIONS:

Attached is revised rule proposal based on the Stakeholder Committee meeting of November 30, 2011. Staff believes consensus was reached on most of the "Proposal for Discussion" at that meeting, so the "Proposal for Discussion" summarizes most of what is in the revised rule proposal.

Where consensus wasn't reached at the meeting, the revised rule proposal tries to balance between differing views. Also, several issues will require ongoing data collection or development of proposals that the Commissioners Court might consider

in the future. The data collection issues, possible future issues, and issues lacking consensus are discussed below. Finally, the new rule language on master development plans was developed in discussions with individual stakeholders, so it is not reflected in the "Proposal for Discussion."

Staff recommends that the Commissioners Court set a public hearing on January 24, 2012 to receive public comments on proposed amendments to Chapter 82, Travis County Code, establishing water availability rules for subdivisions.

ISSUES AND OPPORTUNITIES:

Data Collection, Monitoring, and Possible Future Rule Amendments.

There is consensus that Travis County should collect data on groundwater wells; fund equipment, training, and monitoring/sampling/analysis of groundwater; and possibly enter into interlocal agreements for that work with groundwater districts or other appropriate entities.The Commissioners Court has funded, and TNR is hiring, a hydrogeologist so that the County will have in-house groundwater expertise.

There was general support for developing the knowledge base needed to adopt a "water budget" approach to managing water availability, or other approaches where the current supply of groundwater is ascertained and steps are taken to ensure groundwater levels are not excessively drawn down. More work is needed before a rule amendment could be proposed to the Commissioners Court. However, the best way to address this need is to create an adequately-funded groundwater district with the ability and motivation to effectively manage the Trinity Aquifer.

Use of Groundwater For Amenity Ponds and Irrigation of Common Areas.

Some believe groundwater is so scarce that it should be used only for domestic and other basic needs, not for aesthetics or other luxuries. Others believe that if there is proof of an adequate supply, groundwater should be available for any use.

Staff balanced between these views by requiring that groundwater from a subdivision with centralized wastewater may be used on common areas only until enough treated wastewater effluent is available for those purposes. Also, in all subdivisions, the size of water features supplied by groundwater is limited and use of groundwater for common areas would be accounted for in the groundwater availability certification and curtailed in droughts.

Limitations on Development Intensity Over the Edwards and Trinity Aquifers to Protect Surface and Ground Water.

Some believe that limiting the intensity of all development over key aquifers is necessary to allow those aquifers to be recharged by unpolluted rainwater. Others believe that limiting development intensity is appropriate for projects supplied by groundwater, but intensity of developments not using groundwater shouldn't be limited. They believe the latter help recharge aquifers because surface water used for irrigation there will seep into the ground. They also believe the limits staff has proposed for developments using groundwater are slightly too strict.

Development intensity for subdivisions not using groundwater was one of two issues staff did not initially perceive as an issue for this rulemaking. The other issue was fire protection. Originally, the focus of the rulemaking was solely on groundwater demand, so neither fire protection nor intensity of developments not using groundwater were topics of discussion with the Stakeholder Committee until September, 2011, when those issues came to light in the course of staff's surveying what issues other Hill Country counties had addressed in their water availability rules.

Most Hill Country counties address their water supply as a whole. Three counties (Gillespie, Kendall, and Medina) address fire protection. Six counties (Bandera, Comal, Gillespie, Kendall, Kerr, and Medina) in some way limit the intensity of all subdivisions, including those not supplied by groundwater. Also, Travis County regulations in Title 30 currently limit development intensity in the part of western Travis County in the City of Austin's ETJ, even for subdivisions not on groundwater.

Development intensity is relevant to Travis County's water supply because the land, surface water, and groundwater of a watershed are all interconnected. First, whether groundwater or surface water, all of Travis County's water supply originates as and is replenished by rainfall. Second, groundwater performs an integral function in a watershed because it discharges to the surface as springs and provides the base flow for streams and creeks. Third, the rain that does not seep into the soil and become groundwater runs off the land into the lakes and streams that make up the surface water component of Travis County's water supply. In part of western Travis County, some of that water flows across the Edwards Aquifer Recharge Zone and recharges that aquifer. Finally, both aquifer recharge and infiltration rates and rainfall runoff rates are very site specifric and are affected by soil, geology, topography, and human uses of the land, both in terms of water quantity and water quality. Land development can not only inhibit recharge, but also pollute both the rainfall that seeps into the ground (i.e., the groundwater component of Travis County's water supply) and the rainfall that runs off into lakes and streams (i.e., the surface water component of Travis County's water supply).

In terms of development intensity, staff believes useful guidance is found in the 2005 "Regional Water Quality Protection Plan for the Barton Springs Segment of the

Edwards Aquifer and Its Contributing Zone" that was funded by Travis County and several other local governments. The Contributing Zone of the Edwards Aquifer is the outcrop of the Trinity Aquifer in western Travis County that recieves recharge. The plan provided a range of possible impervious cover limits, i.e. 5% for residential and 7.5% for commercial to 30% for residential and 45% for commercial, if development rights are transferred.

In recognition of the fact that substantial areas of western Travis County have been set aside for preservation, staff recommends that the rules include a development intensity limit of 30% for residential and 45% for commercial, even with no density transfer requirement.

FISCAL IMPACT AND SOURCE OF FUNDING:
None

ATTACHMENTS/EXHIBITS:
Proposed rules amdenments.

REQUIRED AUTHORIZATIONS:

Cynthia McDonald	Financial Manager	TNR	854-4239
Steve Manilla	County Executive	TNR	854-9429
Jon White	Natural Resources Environmental Quality Division Director	TNR	854-7212
Thomas Weber	Environmental Quality Program Manager	TNR	854-4629
Tom Nuckols	Assistant County Attorney	County Attorney's Office	854-9262

CC:

: :
0101 - Administrative - 11-03

EXHIBIT A

Part I. Section 82.201 is amended to read as follows:

Section 82.201 General Subdivision Procedures

(a) *No change.*

(b) Applications.

(1) through (8) *No change.*

(9) A master development plan must be submitted for an applicant to meet "fair notice" requirements under Section 82.102(a). Otherwise, an applicant may voluntarily submit a master development plan as a non-binding planning tool, but it is not required and will not be approved by the Executive Manager or the Commissioners Court, except as provided in Section 82.216(d), Water Availability-Protection of Surface and Ground Water Quantity and Quality. If submitted either voluntarily or to meet "fair notice" requirements, it shall consist of a reasonably detailed map or schematic drawing containing the following:

(A) the boundaries of the original tract(s) and phases of development, if any;

(B) the names of adjacent platted subdivision or the names of the record owners of adjoining unplatted property;

(C) the location, width, and names of all existing or platted streets or public right of-way and all existing easements within and adjacent to the development;

(D) the layout and width of proposed arterials, thoroughfares and collector streets and the general configuration of proposed streets and alleys;

(E) the general arrangement and designations of land uses, and any site for special use (e.g., for parks, open space, detention, or other public facilities);

(F) the approximate location of the 25-year flood plain and the 100-year flood plain, the location and width of existing drainage channels, creeks and water courses within the development; ~~and~~

(G) the proposed location of proposed drainage courses and any necessary offsite extensions; and

(H) estimates of the amount of water to be used and wastewater to be generated in all phases of development, identification of the source(s) of the water, a description of the new or existing water and wastewater facilities that will serve the development, a statement by a qualified engineer or geoscientist that the water source and the water and wastewater facilities will be of adequate capacity to serve the development, the owner and operator of the water and wastewater facilities and the location of the development with respect to any applicable certificates of convenience and necessity, and the schedule for creating any entity that will own or operate the facilities.

Part II. Sections 82.203 and 82.204 are amended to read as follows:

Section 82.203 Preliminary Plan

(a) *No change.*

(b) Plan Standards Outside ETJ.

(1) through (20) *No change.*

~~(21) If the subdivision is in a Western Watershed, the owner and the owner's engineer must certify in writing that water from the Trinity Aquifer will not be a source of water supply for the subdivision.~~

(c) through (e) *No change.*

Section 82.204 Final Plat

(a) through (c) *No change.*

(d) Certifications and Acknowledgments.

(1) through (5) *No change.*

(6) Plat Notes.

(A) through (C) *No change.*

(D)~~(1)~~ No lot in this subdivision shall be occupied until connected to a centralized water distribution system or an approved onsite water well.

~~(2) The following note must also be added if the subdivision is subject to Section 82.213: No land in this subdivision may use or be connected to a centralized water system or water well that draws water from the Trinity Aquifer, unless authorized by the groundwater conservation district that covers this subdivision, or if no groundwater conservation district exists, the Commissioners Court.~~

Part III. Chapter 82 is amended to revise Section 82.213 and add new Sections 82.212 and 82.214 through 82.216, as follows:

Section 82.212. Water And Wastewater Availability-Exceptions.

(a) A subdivision of five or more residential lots averaging two or more acres is exempt from Sections 82.213 through 82.216 and Section 82.203(b)(20(A) through (E) if:

(1) the owner has an agreement with a corporation, district, or other entity to supply the subdivision with surface water; or

(2) the drilling of more than one well on each lot is prohibited unless approved by the County;

(3) the applicant provides the information required by 82.214(b)(1), Water Availability-Special Requirements For Groundwater.

(4) a rainwater harvesting system providing storage of at least 2500 gallons of potable or nonpotable water is installed on each lot when a structure is erected there;

(5) further subdivision of lots is prohibited five years following the filing of the plat; and

(6) the use of groundwater from a well in the subdivision to supply land outside the subdivision is prohibited, except in the event of fire or other emergency the County determines to be temporary.

(b) A subdivision is exempt from Section 82.214, Water Availability-Special Requirements For Groundwater, if it will be supplied by a corporation, district, or other entity that existed on the effective date of this section and whose source of supply does not include a groundwater well drilled after the effective

date of this section in an aquifer that underlies Travis County.

(c) Sections 82.213 through 82.216 do not apply to a subdivision for which a complete preliminary plat or final plat application is filed before the effective date of this section unless land in the subdivision is further divided to increase the number of lots, parcels, or other units of development included in that application.

Section 82.213. Water And Wastewater Availability-Service Plan.

An applicant for approval of a subdivision shall submit a water and wastewater service plan approved by a qualified engineer demonstrating that adequate water and wastewater service will be available to all parts and phases of the subdivision, including the minimum information listed in this section. If wastewater will be treated by onsite sewage facilities, the wastewater elements of the plan may be satisfied by submitting planning materials required by Chapter 48, Rules of Travis County for Onsite Sewage Facilities.

(1) An estimate of the amount of water demand and the amount of wastewater that will be treated and managed throughout all phases of development, supported by engineering calculations based on the anticipated timetable for full build- out.

(2) A description of the new or existing water and wastewater facilities required to serve the development, including the location of and a schedule for completing all new facilities and the plan for financing construction, operation, and maintenance of the facilities.

(3) The owner and operator of all water and wastewater facilities throughout all phases of development and the location of the subdivision with respect to any applicable certificates of convenience and necessity.

(4) If water or wastewater service is to be provided by a district, corporation, or other entity that has not been created as of the filing of the application, a detailed description of the timetable for creation of the entity and the proposed organization and boundaries of the district.

(5) Identification of the source(s) of water to be used in the subdivision. If the applicant does not own or otherwise control the source of supply, the County may require the applicant to obtain documentation certifying the availability of adequate supply from the entity owning or controlling the supply source.

(6) Any supply or service agreements that will be needed before water or wastewater service can be provided.

(7) If the demonstration of adequacy of service involves demand or use restrictions or limitations, restrictive covenants, utility provider rules, or other legally enforceable means of ensuring that the restrictions or limitations will be enforced so that use or demand does not exceed supply.

(8) If water or wastewater service will not be provided by a public system regulated by TCEQ, an operations and maintenance plan for the system.

(9) Documentation of compliance with requirements of all federal, state, and local laws regarding water or wastewater availability. Approval is conditioned on continued compliance with these requirements.

(10) For any subdivision with a centralized water system having 15 or more connections, a demonstration of compliance with Section 82.215, Water Availability-Fire Protection.

(11) For any residential subdivision with 15 or more units, a drought contingency plan including the following elements. The plan shall be consistent with LCRA drought planning standards for subdivisions in Western Watersheds and City of Austin drought planning standards in Eastern Watersheds.

(A) Ongoing public outreach and information for those subject to the plan.

(B) Ongoing coordination with regional water planning groups

(C) Defined drought or emergency response stages for implementation of measures in response to reduction in water supply in event of:

(i) a repeat of the drought of record;

(ii) water production or distribution system limitations;

(iii) supply source contamination; and

(iv) system outage due to failure or damage of pumps or other water system components.

(D) Information to be monitored by the water supplier and specific criteria for initiating and terminating drought response stages, including the rationale for those criteria.

(E) Specific, quantified targets for water use reductions during periods of water shortage.

(F) Specific water supply or demand management measures to be implemented during each stage of the plan, including:

(i) curtailment of nonessential water uses; and

(ii) use of alternative water sources and delivery mechanisms, such as interconnection with another water system, temporary use of a non-municipal water supply, use of reclaimed water for non-potable purposes, etc.;

(G) Procedures for initiating and terminating each response stage, including public notification.

(H) Procedures for granting variances to the plan.

(I) Means and procedures for enforcement of mandatory water use restrictions, including measures such as specifications of penalties for violations, such as water provider rules, restrictive covenants, fines, water rate surcharges, and discontinuation of service.

~~(a) In a Western Watershed, a subdivision may be approved only if all land in the subdivision is prohibited from using or connecting to a centralized water system or water well that draws water from the Trinity Aquifer, unless authorized by the groundwater conservation district that covers the subdivision, or if no groundwater conservation district exists, the Commissioners Court.~~

~~(b) The Commissioners Court may make exceptions to the requirements of this section:~~

~~(1) for developments that meet the requirements for a conservation development under Section 82.220, *et seq.* ; or~~

~~(2) if an applicant provides information adequately demonstrating that applying this section to the applicant:~~

~~(A) is prohibited by Chapter 245, Local Government Code; or~~

~~(B) will impose an undue and unique hardship on the applicant.~~

~~(c) This section does not apply to a subdivision for which a complete preliminary plat or final plat application is filed before the effective date of this section unless the subdivision is later divided to increase the number of lots, parcels, or other units of development included in that application.~~

~~(d) This section expires January 31, 2012.~~

Section 82.214. Water Availability-Special Requirements For Groundwater.

(a) Water service to a subdivision may not be supplied by groundwater from an aquifer underlying Travis County, except the Trinity or Edwards aquifers. Subdivisions using groundwater from the Trinity or Edwards aquifers shall comply with this section.

(b) The applicant shall provide a certification of groundwater availability meeting the requirements of Section 82.203(b)(20)(A) through (E). In addition, the engineer or geoscientist preparing the certification shall supplement it with a report containing:

(i) the results of a walking survey around the inside perimeter of the subdivision and along adjacent public roads to identify all groundwater wells within 1000 feet of the subdivision boundary;

(ii) a list of the record owners of land within 1000 feet of the subdivision boundary and proof that the applicant delivered to each a County-approved questionnaire regarding groundwater wells;

(iii) all information on groundwater wells within the subdivision and within 1000 feet of its boundary contained in TCEQ, TWDB, and TDLR records;

(iv) GPS coordinates or equivalent data locating all identified wells;

(v) unless water will be supplied by a public system regulated by TCEQ, a certification that the quality of the water produced from the test well meets the standards in TCEQ rules at 30 TAC Sections 290.104, 290.106, 290.108, and 290.109 either without any treatment of the water or with treatment by an identified and commercially available water treatment system; and

(vi) any necessary or appropriate lot layout, well location, or use restrictions.

(c) Preliminary plans and plats shall specify the layout of lots and the GPS coordinates or equivalent data for all wells supplying the subdivision in conformance with the groundwater availability certification.

(d) A well in the subdivision may not be located within 150 feet of the subdivision boundary without the consent of the adjoining landowner.

(e) Unless the Commissioners Court approves an update to the original groundwater availability certification proving that long term water supply to the subdivision is not adversely affected:

(1) after completion of the minimum number of wells needed to serve the subdivision, no additional well may be drilled in the subdivision;

(2) lots in the subdivision may not be further subdivided; and

(3) a well used to supply the subdivision may not be used to supply sources other than the subdivision, except in the event of fire or other emergency the County determines to be temporary.

(f) Owners of residential subdivisions with 15 or more units and owners of commercial subdivisions that will use over 100,000 gallons per month shall install County-approved water-level monitoring equipment on one of the wells and dedicate the equipment and an access easement to the County allowing the County to monitor, operate, maintain, and replace the equipment. In lieu of meeting these requirements, the owner of a centralized water system may enter into an agreement with the County in which the owner monitors, operates, maintains, and replaces the equipment on the County's behalf.

(g) This subsection applies to use of groundwater for common area features, such as water features and irrigation of landscaping, sports fields, etc.

(1) If a subdivision has centralized wastewater service, groundwater may be used for common area features only temporarily until a sufficient quantity of treated effluent is available. In the plan required by Section 82.213, Water And Wastewater Availability-Service Plan, the applicant shall include a plan for the phased replacement of that groundwater with treated effluent.

(2) In the plan required by Section 82.213, Water And Wastewater Availability-Service Plan, the applicant shall account for use of groundwater for common area features.

(3) Use of groundwater for common area features shall be curtailed in the first stage of drought as defined in Section 82.213(10)(D), Water And Wastewater Availability-Service Plan.

(4) The volume of common area water features in a subdivision supplied by groundwater may not exceed two acre feet for an individual feature and six acre feet cumulatively.

Section 82.215. Water Availability-Fire Protection.

(a) Owners of residential subdivisions with 15 or more units supplied by a centralized water system and owners of commercial subdivisions shall provide the subdivision with a water supply, water storage facilities, water lines, and hydrants on fire fighting apparatus access roads meeting the requirements of this section.

(b) For residential subdivisions:

(1) minimum fire flow and flow duration shall be 1000 gallons per minute for one hour at 20 pounds per square inch residual pressure;

(2) the maximum distance from any point on a street or road frontage to a hydrant shall be 250 feet ; and

(3) the average spacing between hydrants shall not exceed 500 feet.

(c) Hydrant spacing and minimum fire flow and flow duration for commercial subdivisions shall be calculated as required by Appendix B, International Fire Code.

(d) Water storage facilities must include permanent means for refilling the total storage volume within seventy two hours.

(e) Subdivisions shall include fire fighting apparatus access roads meeting the requirements of the International Fire Code, as amended by Chapter 71, Travis County Code.

(f) In lieu of the requirements of this section, the Commissioners Court may approve other methods of fire protection if the applicant demonstrates it is necessary to avoid an undue hardship and the Travis County Fire Marshal determines it provides an equal or better level of fire protection.

Section 82.216. Water Availability-Protection of Surface and Ground Water Quantity and Quality.

(a) Except for subdivisions governed by Subsection (b), development intensity in subdivisions over the part of the Trinity Aquifer in a Western Watershed or over the Edwards Aquifer Recharge or Contributing Zone shall comply with this subsection.

(1) Impervious cover in a commercial subdivision shall not exceed 45%, except impervious shall not be limited if the subdivision:

(A) has its primary driveway access on a state road, or

(B) complies with Section 82.211(i)(4), Alternate Standards.

(2) Impervious cover in residential subdivisions shall not exceed 30%, except impervious shall not be limited if:

(A) the total number of lots in the subdivision does not exceed the number of acres in the subdivision; or

(B) the subdivision includes a conservation area meeting the conservation development requirements of Section 82.226, Conservation Area.

(b) Development intensity in a residential subdivision supplied by groundwater from the Trinity or Edwards aquifers shall comply with this subsection in lieu of Subsection (a).

(1) In subdivisions supplied by individual wells on lots, all lots shall at least five acres in size.

(2) In subdivisions supplied by a centralized groundwater system:

(A) all lots shall be at least three acres in size; and

(B) the total number of lots shall not exceed the number of acres in the subdivision divided by four.

(c) Impervious cover under this section shall be calculated in the manner it is calculated under Section 82.211, Lake Travis Watershed Water Quality Protection.

(d) The owner of land may file a master development plan under Section 82.201(b)(9), General Subdivision Procedures, that sets out phases of development for which different preliminary plan or final plat applications will be filed and that calculates development intensity based on total acreage in the master development plan. At the owner's request, the Commissioners Court shall determine whether development intensity in the master development plan complies with this section. If approved by the Commissioners court, development intensity in individual phases of the master development plan may exceed the limits of this section if cumulative development intensity in all phases of the master development plan is restricted to comply with this section.